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# JPRS Report

# **Soviet Union**

**Economic Affairs** 

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# **Soviet Union**

## **Economic Affairs**

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# ECONOMIC POLICY, ORGANIZATION, MANAGEMENT

# **Shortcomings, Lack of Planning in Current Conversion Effort**

18010841z Moscow LITERATURNAYA GAZETA in Russian 12 Jul 89 p 11

[Article by Aleksey Izyumov, Candidate of Economic Sciences, senior research worker in the Institute of the United States and Canada, USSR AN [Academy of Sciences]: "Conversion? Conversion! Conversion...: In the File of the USSR Supreme Soviet." The first paragraph is an editorial introduction.]

[Text] It was not long ago that few people in our country knew the meaning of the word "conversion." Now something is said and written about Soviet military economics almost every day. In particular, a heated discussion went on at a meeting of the USSR Supreme Soviet during the confirmation of Minister of Defense D.T. Yazov. And this is understandable. On the one hand, achievements in our foreign policy for the first time in many years have created, instead of the recurrent pretext for escalating military expenditures, a real possibility for reducing them. On the other hand, there are strictly internal reasons. It is quite natural that, in contemplating ways to get out of an economic crisis, we have started to look at heretofore immune items of the state budget. We began to hear appeals more and more frequently from economists, ecologists, and writers to "trim military expenditures," "to remove unneeded fat from the armed forces," and "to review the space program..."

#### From the Time of Witte to Our Days

This is not the first time that the country has been faced with the problem of conversion. Back in the 1890-1905 period, at the insistence of Witte, Russia's military expenditures were cut from 30% to 15% of the state budget. In Soviet times, the first major conversion was conducted between 1920-1924. In those years the numerical strength of the Red Army was reduced from 5 million to 562,000 men! By comparison with that 10-fold reduction, today's—by 12 percent—seems quite moderate. But the military and political situation around our country then was much more complicated than today's.

The second conversion episode in Soviet history was the second 5-year plan after the end of the Great Patriotic War. Enterprises and industries that had been mobilized to help the front were returned to normal peacetime production. This conversion was conducted with specific methods peculiar to that time. And indeed, even the Stalinist conversion was not 100 percent successful: it is enough to mention what kinds of problems the hundreds and thousands of soldiers who had not acquired a civilian specialty because of the war, and who frequently were even left without a roof over their head encountered upon returning from the front.

Many, especially among those who are retired, will recall our third conversion. It was conducted at the initiative of N.S. Khrushchev at the end of the 1950's and the beginning of the 1960's, and it was expressed mainly in a radical, unilateral reduction of the armed forces—in round figures more than 2 million persons. What is more, we will note that the Khrushchev reduction was greater than the current one, despite the fact that we were far from parity with the West at that time.

The Khrushchev conversion gave tangible benefits to the people: It helped increase pensions, and it sharply broadened residential construction, and so forth, but it was conducted, like the Stalinist one, exclusively by command methods, without a well thought out plan and the necessary considerations for social features. It is no accident that our military holds a grudge against Khrushchev up to the present time—many were discharged from the armed forces without warning, sometimes not allowing them to complete even the remaining short service that was needed for a pension.

The current conversion should, it would seem, avoid the mistakes of the past. However, more problems are arising.

At first glance, everything is going well. The military budget and military production are being cut. Hundreds of military plants and the KB [design bureaus] were assigned civilian production tasks, the armed forces are being cut, freeing manpower that is in short supply, and students are no longer being pulled away from their academic studies. The quantitative parameters of the measures announced are being published. During the years 1990-1991, cutting the military budget by 14 percent, or by R10 billion is contemplated, and in total for the current 5-year plan the savings will be R30 billion. While now the share of military expenditures in our gross national product is about 9 percent, then in 1995 it should be reduced by a factor of 1.5 to 2. At the same time, the portion of civilian production of our military enterprises, which now constitutes about 40 percent, should increase to 60 percent by 1995. The contribution of the defense industry to the output of cultural and everyday commodities will increase from today's 22 percent to 33 percent by the end of the current 5-year plan. A big return is expected from the "military" cosmos, in particular, in the area of installing telephone systems in the country.

A lot is already being done. The production of metal-working machines, drilling equipment, and electronic components has been arranged for several plants that produced medium range missiles. SS-20 transporters are being successfully reequipped as powerful cranes in a joint Soviet-West German enterprise in Odessa. Our VVS [Air Forces] are being linked up with civilian transportation—this year military transport aviation will carry 50,000 tons of domestic cargo. Moreover, an idea was brought up in scientific circles to organize a new passenger airline with forces of the VVS. This would not

only give work to hundreds of military pilots and technical specialists who have been discharged in connection with recent reductions, but it would also finally break the oppressive monopoly of Aeroflot.

Among other measures of the current conversion is the sale of army property, conducted by organizations of rear services supply. In the first stage of these sales to civilian users, equipment and materiel amounting to a half billion rubles will be sold, including 20,000 motor vehicles, small boats, radio equipment, and petroleum oils and lubricants. The benefits are tremendous—you see, not only is demand satisfied, but there is also an opportunity to help with the budget deficit.

#### Costs of the Approach

Given the abundance of planning departments, there is still no conversion concept or program. True, the press has repeatedly announced that work on the composition of a national conversion program was apparently started. Working groups for conversion planning were set up in the CPSU Central Committee, the Ministry of Defense, the MFA [Ministry of Foreign Affairs, Gosplan [USSR State Planning Committee], and a number of other ministries and departments. However, neither the character of the work of these groups, nor their composition, nor any kind of plans or recommendations have yet to become the property of the public. Nor was anything said about them at the congress. It has to be assumed that the work is in the preliminary stage.

Meanwhile, in the absence of well-thought-out plans, conversion, nonetheless, is going on, but spontaneously. Its tasks for many, if not for a majority, of the enterprises of the military industry, were a complete surprise. A number of military orders were cancelled in from one to two quarters, that is, practically without warning. This placed the managers of defense production in very serious difficulties. It is known that the readjustment alone of the production for the output of items of average complexity (let us say, refrigerators) requires a year or two, but you have to find new clients, raw material suppliers and components, and retrain the work force, etc.! The difficulties became even greater, because the directive announcements of the conversion coincided in time with the shift of "post office boxes" to cost accounting and self-financing. There have been many times in our history when the economic consequences of an important political decision were not thought out in a timely way. We have made a "cavalier attack" on a serious problem many times.

The present mass reduction in military purchase orders is being conducted frequently not only without fore-thought, but according to the principle—reduce and that is all it takes. In order not to offend especially influential military clients, financing and funds are being cut approximately equally. This approach exacerbates the problem of the producers even more, and especially the developers of military equipment, inasmuch as now the

same programs will have to be fulfilled with a smaller financing total. It is clear that this means either an over-exertion of effort, or a lowering of the quality of a product.

It would be logical in this situation to take a different approach—drop a part of the existing military programs, and concentrate forces on the most important ones. Our military should finally realize that the budget is not a bottomless barrel, and conduct a thorough—and preferably an open—inventory of its economic household. A lot will be found in it that can be sacrificed without damage to defense capabilities.

The absence of a clear plan of conversion also affects its technical aspects. Of course, it is pleasing when a military plant shifts to civilian production. However, when, after missiles and aircraft, it begins to produce baby carriages or machines for bottling milk, you begin to think—is the advanced technology and the select work force concentrated there being utilized in the best way? Our military enterprises were isolated enclaves of the economy for so long that they cannot now painlessly get used to peaceful production. Practically all of the announced cases of conversion take place inside the ministries of the defense complex, without moving the enterprises to the jurisdiction of civilian organs of authority. Moreover, a reverse phenomenon is developing-poorly operating civilian enterprises are being placed under the wing of military-industrial ministries. This is what happened with some enterprises of the former Minlegpishchemash [Ministry of Machine Building for the Light and Food Industry and Household Products] which was transferred with all of its property and work force to the jurisdiction of the USSR Ministry of Medium Machine Building.

Actually, our military industry surpasses by many times the civilian sector in equipment, qualification of workers, and production and technical discipline. But the capabilities of the military enterprises should not be overestimated. It should not be forgotten that civilian production will never have a priority in enterprises that remain within the framework of the military complex. Today, for example, almost all refrigerators, an overwhelming portion [of the production] of television sets, washing machines, vacuum cleaners, and certain other types of everyday equipment are produced in military plants. However, can we say that the quality of these commodities satisfies us?

A special question is the cost of production and the prices of products of converted enterprises. If in the attainment of military objectives, costs are not that important, the main thing here is the highest end result, then for civilian production this principle is not suitable. The ordinary consumer will simply not be able to purchase very expensive products, unlike the Ministry of Defense. Civilian production in military plants will inevitably bear the mark of expensive planning and technology which inevitably will be reflected in prices.

There is another important point—supply. Today these military plants have absolute priority, everything that is the best and in short supply goes to them first and foremost. To the extent that the portion of civilian production at the enterprise is increased, the level of priority in supplies will decrease, and together with it the capability of the enterprise to produce more quality products as well. After encountering the usual problems of their civilian colleagues (obsolete equipment, difficulties with supplies, the lack of discipline of parts producers, etc.), the defense employees soon lose their current qualities little by little. It appears the same will happen with technological and labor discipline—a weakening of routine restrictions will quickly bring them down to the "normal" level.

So it does not pay to set one's hopes on the fact that military industry will lead our consumer sector out of the breakthrough. Here apparently, one can count only on short-term improvement. And if the conversion is not buttressed by the development of competition, a shift to wholesale trade, price reform, and other steps of economic reform, if converted enterprises are not included together with the rest in a real fight for the consumer, they will be deprived of their current advantages and will simply be dissolved into the general mass.

To avoid this, the converted enterprises, in terms of the development of economic reform, should be removed from the defense complex (through their sale to other enterprises and associations, leasing to worker collectives, local organs of authority, etc.) and acquire independence. Otherwise, in the near future, belonging to a defense complex will be turned from a virtue to a drawback. The experience of military-industrial complexes in the West says that exactly this will happen. Numerous studies attest to the fact that, according to all indices, the efficiency (productivity of labor, return on investment, material capacity) of military enterprises is significantly inferior to their civilian colleagues.

#### Is It a Boon to All?

A second dangerous shortcoming of the current conversion is the failure to consider its social factors. The impression is created that today the government does not pay any more attention to this than was the case in Khrushchev's time. There is no denying that the objectives of the conversion are noble, and that the benefits from them for the country should be significant. However, did anyone think about how those whose interests are affected first and foremost—the workers and engineers of military enterprises, their managers, the reduced personnel of ministries and departments, the officers discharged into the reserve—would treat conversion? No sociological polls were conducted on this subject; however, even without them it is clear that there can be no rejoicing regarding conversion among these categories of our population.

It is true that a demarcation has to be made here. For the interests of the ordinary workers, ITRs [engineer-technical workers), and scientific employees of the military enterprises, conversion does not constitute a particular threat. Practically all the advantages in pay, social privileges, and so forth, which they had 10-15 years ago, have, in effect, gone for naught. The average level of pay at Moscow defense plants relate to machine building is now practically equal to the average level of this branch of industry on the whole, that is, approximately 230 rubles per month. At the same time, the negative aspects of work in the VPK [military industrial complex]—the system of secrecy, strict discipline, and tough control over product quality-have been retained. As a result, the military sector of the economy lost its former attraction for the aforementioned categories of workers, a majority of whom, without any particular regrets, will agree to a transfer of their enterprises to civilian production.

The attitude of military prsonnel toward conversion is somewhat more complicated. On the one hand, managers of enterprises and departments of our defense industry also suffer, of course, from the strictness of military production, and in this sense the situation of their civilian colleagues is significantly calmer. However, on the other hand, not one civilian industry has such privileges in supply and financing as do VPK industries. The priority of defense industries not only assures them much more favorable conditions of work, but also raises the prestige of their managers, affects the level of personal privileges and the number and importance of state awards that are granted, etc. Inasmuch as conversion denotes the deprivation of the aforementioned advantages, than it can be expected that it will evoke a definite negative reaction among VPK workers.

One more important social aspect of the conversion is the attitude of the military toward it. A reduction in the armed forces, those already announced and still to be announced, in my view, did not delight Soviet officers. And this is not surprising. The memory of the excesses of the Khrushchev demobilization is still fresh.

According to the announced reduction for 1989-1990, about 100,000 officer personnel will be discharged into the reserve, and also a part of the warrant officers and petty officers. Meanwhile, an organ has not yet been set up which would be engaged systematically in the retraining and job placement of former servicemen in a civilian life that is unfamiliar to them.

Of course, the Ministry of Defense and the Goskomtrud [State Committee for Labor and Social Problems] are doing something along this line, and plans are even being made for the creation of special commissions under the ispolkoms [executive committees] for furnishing assistance to servicemen and their families; however, just so that these measures are not late. Experience shows that by far even highly qualified military specialists cannot always find work in their specialty. An example of this is

the situation with military engineers who served on nuclear-powered ships in the VMF [navy]. Their discipline and experience would be entirely suitable for our nuclear power engineering, but for the time being the path to a new position is frequently closed for nuclear specialist officers because of departmental separateness.

Housing is the most serious problem for those discharged into the reserve. If even before the current cuts we had about 20,000 officer families without a roof over their head (7,000 in Moscow alone), then you can imagine what can happen when those who are discharged pour into the civilian economy! According to estimates, this is another 40-45,000 families, of which the Ministry of Defense will be able to provide apartments for 7,500 thousand families in 2 years.

It can be assumed that the outlook for the reduction in the numerical strength of their subordinates does not make some members of the senior military leadership happy either. We will recall that a half year ago some representatives of the Ministry of Defense chastised scientists who expressed the idea on the pages of LIT-ERATURNAYA GAZETA concerning the unreasonableness of a general callup of students of VUZ's [higher educational institutions] into the armed forces. Now this seditious thought has become common; however, could the views of the former opponents have changed so quickly?

#### A Law Is Needed

Speaking to the point, we are faced with three questions: What should be produced with the resources made available? Who should be involved in planning for and implementing the conversion? What should be the economic, political, and legal mechanism for retraining?

Speaking about the first question, the shift of part of the resources of defense industry, which was announced with fanfare, to patch up holes in the collapsed agricultural industry does not seem to me to be an optimal solution. Even greater concern is evoked by the proposal to utilize resources from the reduction of defense expenditures on such projects as a Soviet-American flight to Mars, or the construction of a bridge between Chukotsk and Alaska.

The Americans approach the question of national priorities in the use of resources that the economy can give for the arms race very seriously. In May of this year at an international conference in Bologna (Italy), the American national commission on disarmament and conversion submitted a document "The Budget Is the Salvation of America" which scrupulously mentions all of the most acute socio-economic problems of the United States, the "price" of their resolution, and the potential sources for covering the corresponding expenditures at the expense of items in the military budget.

Why should we not compile such a list, let us say, for those R10 billion by which our budget will be cut in the coming 2 years? It goes without saying that our list will be much longer than the American list. The desperate crisis in our health services and social security and food supplies, the very difficult situation in ecology, the provision of housing, and the area of education—these are our priorities today. Flights to Mars can wait until better times.

So that the distribution of resources occurs in accordance with the needs of the country, it is necessary to resolve these questions openly, with the participation of all of the people. Successful implementation of conversion is possible only under conditions of cooperation of all interested forces—the higher political and military leadership, the Supreme Soviet, the local organs of authority, worker collectives of enterprises of the defense complex, and, of course, the general public.

For the time being, only organs of executive authority are engaged in planning the conversion, and it is in this that there is a fundamental difference in our approach from the situation in countries in the West. There, the government shuns practical participation in the conversion, but a lot is done by social organizations, trade unions, and local organs of authority.

Our situation looks rather strange against this background: At a time when the government is making one important decision after another on conversion, the trade unions and local organs of authority, whose interests conversion affects in a very direct way, remain silent. The structures for public control over its progress are being established extremely slowly. (I know of only two small groups of conversion "activists," one of which functions in the staff of the Soviet Committee for the Defense of Peace, and the other, in the USSR Academy of Sciences. The status of these groups can be judged if only because they are not permitted into defense enterprises that are being converted.)

The chief defect of the current conversion mechanism is the lack of legislative support.

It is patently clear that neither the trade unions, the local authorities, or the legislators will be able to break up the monopoly in conversion possessed by defense agencies until a wide range of information on the VPK is made public.

While some progress has been noted in military and space openness, data on the VPK situation has changed very little. As previously, nothing is known about the number of those engaged in military production (the American specialist S. Melman puts it at 4-7 million persons against 3.5 million in the United States), their geographic distribution, and the technical capabilities of individual enterprises and their production performance. The irony is that a majority of our military-economic secrets do not have a practical significance,

either, because with modern surveillance techniques it is not possible to conceal them, or because they "conceal" that which in the West has long been yesterday's science and technology.

In other countries, much broader data on military economics is published and, as a rule, special laws exist in this respect. In the United States, any military contract costing more than \$5 million is made public. There is voluminous literature in the West that encompasses literally everything, right down to the legal and ideological aspects of the VPK. Owing to this, the most delicate problems of conversion are discussed freely there in the mass media, and anyone who wishes to can get a complete picture about it.

Without a revision of our atitude toward glasnost in the military and military-economic sphere, we will not be able to implement conversion efficiently. Representatives of the VPK received an overwhelming majority on the staff of the Committee on Questions of Defense and State Security that was formed. Meetings of the committee will be closed to the press. I am convinced that in the Fall the Congress of People's Deputies will have to consider the question of the composition and work routine of the committee. Otherwise it can hardly perform the functions of national controller of the VPK.

In its completed form, the USSR national program for conversion should include plans for re-profiling military production and retraining the work forces of military enterprises and personnel staffs of demobilized military units. It should be a law that is tied together in an industrial, financial, and territorial relationship, and coordinated with measures for cutting military expenditures, the armed forces, and armaments.

The following steps are needed for the preparation of such a program.

- 1. Creation of a special commission on conversion in the new USSR Supreme Soviet (or an appropriate subcommission on the staff of the Committee on Questions of Defense and State Security). The main task of this commission should be to work up a law on planning conversion, defining the duties of military, economic, and Soviet organs for planning, financing, and implementing conversion.
- 2. Creation in the USSR of a state commission on conversion headed by a member of the Politburo and whose membership would include representatives of the VPK, Gosplan, Ministry of Defense, MFA, and the AUCCTU [All-Union Central Council of Trade Unions], and other interested ministries and departments. This commission should become the main planning and coordinating center for the preparation of the national plan of conversion.

3. For the success of the practical preparation of conversion plans, it is necessary to establish appropriate conversion commissions or committees at all enterprises of the military industry and at local organs of authority in those regions where there are military enterprises and units.

These committees should have worker, engineer, economic, soviet, and military managers who should have all the necessary information and documentation for the preparation of conversion plans.

Along with re-profiling military enterprises and bases, one of the forms of their conversion could be their sale, with the participation of civilian enterprises and local soviets.

- 4. Acceleration of the declassification of data on our military economics. The organization of an objective-oriented program of scientific research for the practical preparation of conversion, including the creation of a national program "Conversion-2000."
- 5. Explanation and widespread propaganda of the ideas and principles of conversion in the Soviet armed forces, military-industrial complex, and among the population. With this purpose in mind, it makes sense to organize, parallel with the state and parliamentary commissions, a public commission on conversion, which would have representatives from the USSR Academy of Sciences, SKZM [Soviet Committee for the Defense of Peace], the "Znaniye" society, the press, the Council of War Veterans, etc.

And lastly. I will repeat once more that, with all of the importance of the conversion as a source of additional resources for our economy, it should not be counted on as a panacea. If conversion is conducted skillfully and effectively, it, of course, will help us get out of the crisis, but the long-term resolution lies on the path of radical economic reform. Without it, sooner or later we will "eat up" our military billions in the same way that we "ate up" our oil billions earlier.

# Centralized Control Hinders Investment, Retooling

18200395 Novosibirsk EKONOMIKA I ORGANIZATSIYA PROMYSHLENNOGO PROIZVODSTVA in Russian No 5, May 89 pp 108-118

[Article by N. A. Vasilyeva, candidate of economic sciences, Institute for Economics and the Organization of Industrial Production in the USSR Academy of Sciences Siberian Branch, Novosibirsk: "It Is Difficult To Build Using One's Own Resources"]

[Text] Well organized investment activity is a very important sign of effective management. The management model adopted determines its success to a large extent. Today, when the country's economy is going

through a difficult stage in replacing the economic mechanism, one of the key transformations is the introduction of the self-financing principle for the investment activity of enterprises.

#### What Is in the Luggage?

The monopoly of upper echelons of authority over the development of an effective investment policy characterizes the centralized regulation of capital investments. To a certain extent, these positions are unshakable and until now could be judged based on the tenacity of the concept of transforming higher branch and other management agencies into "technical development staffs."

This outwardly logical concept rests upon the "convergence" of two contrary processes: On the one hand, the disaggregation of the scientific and technical development programs compiled by central authorities (the USSR Academy of Sciences, USSR State Committee for Science and Technology, USSR Gosstroy, etc.) and, on the other hand, the determination of the requirement for capital investments engendered by the needs of the enterprise itself. The result of the congruence—the program for the complex development of the enterprise—is the starting point for a feasibility study, design and cost estimate documents, title list, capital construction, and other documents and—to some extent—an enterprise's claim to capital investments.

Centralized capital investment "demand" mechanisms and the regulation of supply and demand are naturally included in the concept. They are organized based on an assumption concerning the gap in the time between the formation of enterprise investment assets and their actual use. The availability of temporarily free monetary assets (amortization fund and profits), which are concentrated in the state budget and ministries and which are directed (for example, according to the "leading link" principle) toward financing state capital investments, comes from this. An inalienable attribute of the concept is the "rate setting" of investment activity in the form of limitations on capital investments, the capacities of design and construction organizations, and material and technical support.

This model, which has been embodied in the appropriate economic mechanism, has led in practice to a number of stable negative phenomena. These were particularly revealed when the directors of 70 industrial enterprises in Novosibirsk were surveyed in 1988.

Two-thirds of the respondents pointed out the passive role of an enterprise in developing an investment policy; more than half—the absence of programs for the integrated development of an enterprise; and many—the absence of capital construction in their enterprise.

The priority of new construction has been cultivated for years to the detriment of retooling and reconstruction. The "aging" of enterprises, high degree of fund depreciation and technical backwardness come from this. About half of those surveyed pointed out that this situation was typical. Approximately 80 percent mentioned the low rates of scientific and technical progress (the updating of products, the improving of their quality and the introduction of advanced equipment and production processes).

In economic practices, the financing of investment activity is carried out using the enterprise's own assets, borrowed assets and assets from the branch and the state budget.

The following approximate ratio has taken shape among the mentioned sources: 30 percent, 10 percent, 30 percent, and 30 percent. A large portion of the assets, which are directed toward financing capital construction, are not directly connected with the results of the enterprise's economic activity. The situation is aggravated by the fact that, instead of all the "legal" forms for regulating supply and demand in this area (allocating, the principle of singling out the "leading link", the competitive selection of capital construction projects, the granting of tax and credit preferences for priority work), informal regulators have received an excessively broad dissemination. The authority and personal ties of local party and soviet agencies of power; the presence of "their own" people in a ministry, Gosplan, Gossnab, Gosstroy, etc.; and the persistence and "penetrating force" of the enterprise's leadership—these—and not the real requirement for investments and their effectiveness—have often begun to determine the allocation of financial resources for development.

Two-thirds of those surveyed pointed out the absence of any connection between the financing amounts and the results of the enterprise's economic activity (gross income, profit). Approximately the same number of replies pointed out the predominance of informal regulators during the allotting of assets for capital construction. Concerning the structure of the sources for financing capital investments, enterprises, which primarily use the state budget and ministry (department) funds, predominated in the group being examined. That is why there is no guarantee that more effective investments will be selected. The fragmentation of investment resources (300,000 large and small projects are being built simultaneously in the country), the attitude of enterprises to centralized financial resources as "gift money" and the absence of economic incentives for its effective use come from this.

Allocating and other methods for the centralized regulation of investment activity have inevitably engendered a shortage in material and technical resources; the capabilities of design, construction and other organizations; and the testing and experimental base. This has led to the inequitable position of the contractors in the economic contract and to the dictate of the designers and builders.

More than two-thirds of the directors who responded pointed out that the following situation was typical: A shortage in the capabilities of design and construction organizations disrupts project construction and design execution time frames and leads to a rise in the cost of designs and construction, an excessive growth in uncompleted construction and stocks of nonstandard equipment, the scattering of assets, and the use of outdated designs.

Eighty percent of the respondents pointed out that investment activity, especially that being carried out through one's own financial resources and bank credits, is encountering difficulties in supplying contract organizations with material and technical resources, capacities, etc. At the same time, the forced expansion of the construction method, which uses an organization's own resources and other "natural" methods (designing using the forces of one's own design office, testing and experimental facilities, etc.)—with their present material and technical base and personnel support—is not capable of insuring the required level of efficiency in the work being performed. A total of 64 percent of those surveyed pointed out that this was typical.

For the national economy as a whole, the integral activity of the mentioned trends has expressed itself, for example, in the fact that the cost of projects being constructed grew by 11 billion rubles, or by 24 percent of that initially approved, and the fact that the technical and economic indicators in half of the projects worsened during the first four years of the five-year plan that has passed. According to USSR Stroybank data, 25 percent of the projects, which were shifted to the 12th Five-Year Plan and which correspond to the present scientific and technical level according to the conclusion of the ministries, were worked out 10-20 years ago.

The mechanism, which has been adopted for monitoring and evaluating investment decisions, has given birth to a new circle of problems. The main one is the formation of a peculiar type of "double morality." On the one hand, there is the evaluation of investment activity in accordance with the number of measures and the amounts expended on them; and on the other hand, there are the calculations of the economic efficiency of these measures. The number of measures carried out evidently says little about this-just as measuring the percent of plan fulfillment according to this number: There are no two measures alike. The "expended sums" indicator for the mentioned measure is also unfit as an evaluation one since it encourages the well known "assimilation of expenditures." Concerning the economic effect, this is more like a tribute to economic theory in its present form since its actually calculated totals have absolutely no correlation with the main evaluation indicators of an enterprise's work. Approximately two-thirds of the directors surveyed pointed out that either an evaluation of the actual effectiveness of investment activity is not carried out or this evaluation is purely a formal act in their enterprise.

The prevalence of an expenditure ideology, low efficiency and quality, structural distortions in the economy, low rates of scientific and technical progress—these are the main burden of the problems in investment activity which our domestic enterprises found themselves with on the threshold of the radical economic reform.

#### The Miserly Pay Twice

The years 1987-1988 brought changes in the investment activity of enterprises. In brief, they consist of the following.

Side by side with a centrally conducted investment policy, an enterprise is being granted the right to develop and approve on its own a capital investment plan for maintaining production capacities, retooling, reconstructing, expanding, and updating products. It is assumed that all of this and, furthermore, the construction of non-production projects will be basically financed from the production and social development fund and bank credits, that is, based on self-financing principles.

The enterprise is receiving the right to develop the design and cost estimate documentation and to approve it as well as production and non-production project title lists and construction and installation work schedules (in coordination with the contractor) for projects whose construction is being carried out using the cost accounting income of the enterprise's collective and bank credits, using its own forces and on a contractual basis. Enterprises can perform this work on a competitive basis. The right to reject obsolete designs is being given to them. They direct the construction based on a contract, combining contract and economic methods. It is assumed that this enterprise investment activity will be supported by the necessary resources and contract work in a top priority manner. The requirements for evaluating the actual effectiveness of investment activity are being raised.

With all of the progressiveness of the mentioned transformations, a compromise between centralized and indirect economic regulation is clearly seen in them. In order to get rid of the negative trends, an appropriate transformation "critical mass" is required. As the experience of economic reforms in our and other socialist countries shows, the fading of reforms is usually connected either with the inadequacy of the planned changes in the search for "wise compromises" or with a retreat in their practical realization.

In the area of investment activity—as in no other starting conditions determine the fate of the new economic mechanism. Enterprises with worn-out fixed capital and a neglected social area encounter enormous difficulties on the threshold of self-financing. Large sums are required to update equipment. The equipment, which replaces the old, is much more expensive; however, it is far from being more efficient to the same degree. Enterprises are not in a position to earn these amounts using old equipment, having low labor productivity, having large operating expenditures, etc. The inclination to solve tasks using the traditional method comes from this. This inevitably engenders nervousness in the operations of the other part of the enterprises, who understand perfectly that the ministry's concern for the average branch reputation will be carried out at their expense. Intrabranch redistribution also undermines self-financing for these enterprises.

Unfortunately, the new economic mechanism provides a rather large number of channels for such a redistribution. There is also the normative principle for distributing profit since the approval of norms is remaining under the jurisdiction of higher management agencies as is the opportunity to remove a portion of the amortization fund from enterprises despite the general condemnation of the practice of not using the assets, which are intended for simple reproduction, as intended. Finally, there is the withdrawal of a portion of the profits in the form of payments for funds even in a case where they are established through one's own assets and bank credits.

The period, which enterprises have worked under the new conditions, is comparatively short and investment activity essentially requires comparisons extending over time. Nevertheless, certain evaluations of the changes occurring in this area are possible. The results of a survey of 93 industrial enterprises in Siberia, which were transferred to complete cost accounting and self-financing on 1 January 1987, testify to this.

The first observation concerns the norms for distributing profit. We did not manage to discover any common principles for their formation. Whereas one can somehow understand a difference in the norms for branches, significant differences in them for enterprises in one and the same branch defy a reasonable explanation. For example, the percentage of deductions for the budget among Ministry of the Petroleum Refining and Petrochemical Industry enterprises varies from 9 to 89 percent; for light industry enterprises-from 20 to 80 percent; for Ministry of Instrument Making, Automation Equipment, and Control Systems enterprises—from 1 to 50 percent; etc. Substantial variations in deductions for the budget are also observed in a ministry even if one takes a single enterprise. For the Irkutsk Proletariy Knitted-Goods Factory, they were 41.7 percent in 1987, 58.5 percent in 1988, 65.9 percent in 1989, and 73.0 percent in 1990. For the Novosibirsk Fur Factory, they were 72.6 percent in 1987 and 78.8 percent in 1988.

The directors of the surveyed enterprises unanimously point out that the norms for payments into the budget and the ministry's reserve do not leave them enough profit for self-financing. According to the estimates of many directors (the Krasnoyarskiy Silk Combine, the Krasnoyarsk Zarya Clothing Association, etc.), an enterprise should have at its disposal at least a third of the profit, which it receives, for normal operations under the conditions of self-financing. This amount should be much larger for enterprises with unfavorable starting conditions. This pertains primarily to light industry. For example, the majority of light industry enterprises in Irkutsk Oblast are located in dilapidated and impractical structures. The average age of the equipment in the branch is more than 15 years, the active portion of the funds is renewed slowly (by less than 7 percent a year), and the average wage is 30 percent lower than that for the oblast's industry as a whole. It would seem that the ministry should take these circumstances into consideration. This, however, has not occurred. For example, the norms permit the Angara Footwear Association to have 2.4 million rubles when the requirement is 12 million rubles a year released by the ministry. What accounts for the shift of unprofitable planning enterprises to selffinancing? The Irkutskoye Leather Production Association, for example, has a production expansion fund, which is formed from amortization, totaling 191,000 rubles, and the FSKM [Fund for Social and Cultural Improvements] and ZhS [(Fund for) Residential Housing Construction] is 27,000 rubles, according to the norm. The requirement for production and social development needs is approximately one million rubles.

The directors also complain about the retained practice of removing a portion of the amortization deductions (the Kemerovo Khimmash plant, Irkutsk and Bratsk aluminum plants, Angarskiy Cement Mining Combine, etc.). The directors of the Angarsknefteorgsintez Production Association point out that the norm for deductions from amortization permitted 50 million rubles to be withdrawn from the association in 1988. This led to a shortage of assets for retooling totaling 30 million rubles. Representatives from a technical carbon plant (Altay Kray) pointed out that only 21 percent of the amortization deductions remained with the plant in 1987 when the entire 100 percent remained in 1986.

The large balances of unused production expansion funds, FSKM and ZhS, despite the general complaints about the insufficient amounts of these funds, put one on one's guard. The reasons for this can be illustrated using the example of the Krasnoyarskiy Tire Plant. It fulfilled its capital investment plan by 96.3 percent during the first half of 1987 and the one for construction and installation work by 64.6 percent. The supplying of construction with ferro-concrete items was only 16 percent of the annual requirement. Equipment for the reconstruction was kept in the warehouse over and above every time frame because construction was not ready to receive it. Equipment for technical retooling was not handed over for installation.

As before, enterprises are pointing out the difficulties with design support, poor quality designing, etc. Because of this, the start of the reconstruction of the Irkutskiy Cardan Shaft Plant was moved to 1989. Meanwhile, the enterprise was freed until 1989 from deductions from profit for the budget, payments for funds and transfers to funds in connection with the retooling. Payments for funds will be two percent in 1989 and deductions for the budget—7.7 percent; in 1990, deductions for the budget will be 12.2 percent—and the start of the reconstruction will occur at the end of the financial privileges. This will worsen the enterprise's financial situation, require significant ministry subsidies and make self-financing conditions a fiction.

Approximately 70 percent of the Angarsknefteorgsintez Production Association's fixed capital is morally and physically obsolete but the allocations only provide for updating it by up to five percent a year. The representatives of the Barnaulskiy Equipment and Machinery Plant pointed out that they were not able to obtain allocations for production construction in 1987 and that the production expansion fund turned out to have a surplus. All of these factors naturally impact on the indicators for commissioning fixed capital and assimilating capital investments.

Enterprises are also encountering relatively new problems that are peculiar to the present economic mechanism. They were studied during the conducting of the EKONOM business game in a number of Novosibirsk enterprises.

The main problem can be formulated as the danger of adopting a poor or ineffective decision (incorrectly set goals, poorly selected projects and capital investment plans for this or that project). The reasons are varied: the predetermination of directively assigned avenues, projects or investment plans using, for example, a large percentage of state orders and direct investment instructions from the higher organization and local management agencies; the absence, shortcomings or defects in forecasting information of a branch and general economic nature about the condition of the domestic and world markets; and the absence of a complex program for developing the enterprise and of a mechanism for developing and adjusting the investment policy.

Another problem is the deferment or refusal to adopt effective investment decisions in connection with a shortage of financial resources. The reasons for this shortage are being looked at more or less clearly: the limitation on access to centralized sources for financing; the amounts of cost accounting income predetermined "from above" by a state order, allocation and fund supply and firm prices; the absence of a clear policy for developing cost accounting income and for attracting loan assets. As an example, we will cite the Sibelektrotyazhmash Plant, which has a state order for the entire 100 percent of its production capacity and which is selling its products at firm prices in accordance with

the list. The enterprise is in a position where the price of its products does not cover the increased expenditures for research and development. The reduction in the percentage of scientific-intensive products will cause the plant to produce obsolete products in two-three years. The enterprise is even being deprived of an opportunity to influence its own cost accounting income through individual and group orders which require, as is known, increased expenditures since the financial conditions for implementing individual, group and series orders practically do not differ. As a result, the enterprise is really facing the threat of a reduction in its investment requirements in an area that is very important to it—scientific and technical progress.

Finally, the third problem is the deferment, reduction in efficiency or refusal to make an investment decision because of the complexities in obtaining allocations for designing and for a contract, because of their shortage and because of the low capacity and comparatively lower efficiency of their own planning, design, construction, testing, and experimental base.

Therefore, during the transition period, our enterprises should keep one eye on the old investment problems—the "inherited" illnesses of the compromise management method—and, with the other, look out for new and still unknown difficulties. Moreover, they should not lose sight of the outposts of scientific and technical progress whose investment activity, which is organized in accordance with all the rules of a market economy, now uses those concepts and categories whose meaning we have still not even learned to understand ("curved technological breakthroughs," information technologies, tax regulation of investment activity, etc.).

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## PLANNING, PLAN IMPLEMENTATION

Ministries Continue 'False' Statistical Reporting 18200337 Moscow EKONOMICHESKAYA GAZETA in Russian No 17, Apr 89 p 18

[Article by Ye. Ivanova, deputy chief of the Administration for Improvement of Statistics Methodology of USSR Goskomstat: "Illusory Prosperity"]

[Text] According to data from USSR Goskomstat [State Committee for Statistics], the practice of overreporting in bookkeeping stubbornly persists.

It sounds naive to ask whether it is possible today to manage an enterprise, a sector, or a national economy as a whole without reliable information. However the question is not an idle one. As before, accounts are often deliberately distorted in order to embellish the true state of matters or to falsely record work which has not been performed. As a result of overreporting, bonuses are paid

out which have not been earned and the basis for non-labor income emerges. The state is suffering material loss estimated at tens of millions of rubles.

Last year USSR Goskomstat workers in conjunction with specialists from finance and banking organizations and law-enforcement agencies conducted inspections of bookkeeping in several ministries and departments.

The results of the inspections showed that, as before, the practice of overreporting in bookkeeping stubbornly persists. At every second organization of USSR Minvostokstroy [Ministry of Construction in the Eastern Regions of the USSR], for example, there was found overreporting and distortion of accounting data on the amount of labor and contract work.

In its accounts for January-March, January-April, and January-May 1988 PMK-147 [expansion unknown] of trust No 8 of the territorial construction association "Primorkray-stroy" designated as operational a 30-apartment dwelling block section in the settlement Razdol'noye of the Nadezhdin Rayon in the Primorskiy Kray. In fact, however, it was handed over without an adjoining store or a consumer service establishment. In the building the televisioncable junctions had not been mounted on the floors, heating units had not been installed, work had not been finished on the gas supply, and the external electric lighting had not been completed.

At several of the organizations examined at USSR Minvostokstroy, cases were noted where reports of completed projects included amounts of work which were not corroborated by primary documentation. In addition, instances were uncovered of overreporting of amounts of contract work involving technical stages and work packages.

A total of 4,500 rubles of such work was included in the report of SMU-12 [Construction and Assembly Administration] of the "Petropavlovskstroy" trust of the territorial construction association "Kamchatskstroy" for March 1988; PMK-12 of construction and assembly trust No 1 of the territorial construction association "Amurstroy" included in its accounts 430,000 rubles of overreported work for the first six months of 1988, and SU-5 [Construction Administration] of that same trust included 66,700 rubles of overreported work.

Or take for example the system of USSR Minneftekhimproma [Ministry of the Petroleum Refining and Petrochemical Industry]. An inspection of the reliability of their bookkeeping for 1987 and the beginning of 1988 revealed distortions in accounting data at 52 production associations and enterprises out of 67 inspected.

Exaggeration of data on contracted deliveries amounted to 1.5 million rubles; on volume of production, 400,000 rubles; and on production costs, 6.5 million rubles. In

several instances accounting data had been underreported. Thus, the accounts of 38 associations and enterprises showed profits less than the actual amount by 8 million rubles.

As a result of this account-padding the state sustained a material loss of a sum total of 200,000 rubles, including 50,000 rubles paid out for unearned bonuses. Funds for economic stimulation in the amount of 900,000 rubles were needlessly charged on. Bookkeeping distortions resulted in a shortfall in state revenues of 9.5 million rubles. This is especially intolerable in times of a budget deficit.

At 15 of that same ministry's enterprises distortions in accounting data on fulfillment of contractual obligations were revealed. Cases were uncovered at the Barnaul tire plant, the Kiev association "Krasnyy Rezinshchik," the Donetsk, Barnaul, L'vov, and Lisichansk industrial rubber goods plants, the Groznensk chemical plant, and the Volzhskiy tire plant. Inspections conducted by the control and inspection staff at these enterprises in 1987 did not establish any violations. Apparently pursuit of narrow departmental interests is still strong!

Matters are worse yet at USSR Minpribor [Ministry of Instrument Making, Automation Equipment, and Control Systems]. Over the same period (1987 and the first half of 1988) unreliable accounting data was discovered practically everywhere in 55 production associations and enterprises. In a number of instances the accounts showed a 100 percent fulfillment of contractual obligations despite a shortfall in meeting delivery contracts.

For example at the Serdobsk watch factory 11,000 rubles were overreported, which permitted the factory to show a 100 percent fulfillment of the plan for deliveries for the first quarter of 1988 despite an actual 99.9 percent fulfillment. As a result 4,700 rubles in bonuses were paid out to the managing workers at the factory.

Fulfillment of delivery commitments for the first half of 1988 at the L'vov PO [production association] "Mikropribor" imeni The 60th Anniversary of Soviet Ukraine and the factory of biophysical instruments was exaggerated by 11,000 and 17,000 rubles, respectively. In their calculation of fulfillment of contracts these enterprises included shipments to consumers of products rejected as defective.

In January of the current year the USSR Collegium of Goskomstat heard the report of the USSR Ministry of the Maritime Fleet concerning work to improve stock-taking and bookkeeping conditions in the sector. It was noted that there were no proper procedures in this ministry. Distortions of accounting data on loading and unloading work and labor costs were noted at 14 of the 31 ports examined. Data on retail turnover were exaggerated at 11 bureaus and 27 enterprises, comprising respectively 50 and 39 percent of organizations examined. As a result of groundlessly attributing expenditures

to productions costs, distortion in stock-taking, and improper distribution of financial returns, accounting distortions occurred in production cost and profits. Inspections established exaggeration of proceeds from cargo and passenger transportation at 5 enterprises at an amount of 500,000 rubles. At other enterprises they were underreported by 700,000 rubles. According to the results of the inspections a total of 2.9 million rubles in additional payments were added onto the budget.

Each year numerous cases are disclosed concerning unreliable reports of stores of uninstalled equipment. An inspection at the beginning of 1988 uncovered instances of concealment of equipment at 224 enterprises and organizations of the fuel and energy complex; of the machine-building complex, 230; of the chemical and timber complex, 131; of the metallurgical complex, 36; of the agro-industrial complex, 2,426; and of the construction complex, 372.

A total of more than 50 million rubles of uninstalled equipment was concealed from stock-taking at the inspected enterprises of these complexes!

Those people committing overreporting, concealment, and other accounting distortions will be punished in accordance with existing legislation. In 1988 5,614 leaders of enterprises, organizations, and collective farms were punished at the recommendation of the organs of government statistics. In all, 5,832 people were penalized financially; 767 workers were penalized by the party, and 19,584 were subjected to disciplinary action.

Among the reasons for accounting distortions in the first place, perhaps, it is possible to emphasize organizational and economic deficiencies, poor departmental control, a low level of primary stock-taking in the enterprises and organizations, and an absence of proper discipline over the cadres, especially over the economic services.

## State Orders, Forced Contracts Counteract Enterprise Independence

18200352 Moscow SOTSIALISTICHESKAYA INDUSTRIYA in Russian 11 May 89 p 1

[Article by I. Matviyenko, Kemerovo Oblast chief state arbiter; distinguished RSFSR jurist: "Taming the Obstinate"]

[Text] The Kemerovo Oblast State Board of Arbitration [Gosarbitrazh] examined more than 12,000 economic disputes last year. What is the subject of the disputes between suppliers and customers, clients and contractors?

Today it is obviously clear to everyone that the practice of issuing state orders for 1988, when everyone and everything was regulated by directives from higher organs, has compromised itself. Production volumes that were programmed from center frequently were not backed by the necessary resources and subsequently migrated to "mandatory" contracts that in many

instances remained unfulfilled as in the past. The number of enterprises violating delivery discipline is diminishing slowly. Even according to the indicators of official statistics. But in practice, we not infrequently encounter cases where an enterprise pays liquidated damages [neustoyka] for shortfalls in its deliveries, while the reports cite 100-percent fulfillment of contracts.

The state order situation has now been corrected. But just look at the way it has been corrected! According to the temporary statute confirmed by the government on the procedure for forming them in 1989 and 1990, ministries and departments will not issue state orders, but will only reach decisions on placing them in accordance with the plan for the economic and social development of the nation. The enterprise is stripped of the right to dispute the correctness of issuing a state order. It is thus possible to amend the Law on the State Enterprise elegantly without officially changing it.

Through the efforts of USSR Gossnab [State Committee for Material-Technical Supply] and USSR Gossarbitrazh, the part of the product that was not included in the state order turned up in a no less centralized sphere. It became the subject of mandatory deliveries based on existing economic ties. In addition to everything else, the volume of delivery was set at the previous year's level.

The situation was all the more unique because the drafting of contracts based on existing ties for 1989 were—once again thanks to the efforts of Gossnab and Gosarbitrazh—commenced already in April of last year. By the time state orders were issued and formulated, [the contracts] were already concluded. When the state orders came out, it was found that some of the products covered by them were to go to other customers. Thus, the volume of mandatory deliveries at many enterprises significantly exceeds their potential.

Here is a typical example. The Tayginskiy Mineral Wool Products Plant concluded contracts based on existing ties in July of last year. But in December it received a state order with other addressees. The director, literally in despair, asked who should be given priority. He was obligated to fulfill the state order. He did not have the right to sever the existing ties. The answer to him was...silence.

Matters got worse as time went by. Gosplan and Gossnab invented one more slipknot: so-called consumption ceilings that are not provided for anywhere in the Law on the Enterprise. The official version is as follows: to secure the delivery of products that are not part of state orders.

Departments must understandably look to their own interests. Gosplan must see to the fulfillment of the control figures; Gossnab must see to it that the promised indicators of expansion of wholesale trade in means of production are met.

Wholesale trade in the hands of skillful planners took on the traditional features of administrative pressure. Gossnab was able to include in its sphere even the deliveries which for a long time had been carried out between suppliers and customers on the basis of direct contracts.

For example, the Kemerovo "Karbolit" Science-Production Association for many years acquired its raw materials from the Dzerzhinskiy Phenol Plant in Donetsk Oblast. In the middle of last year, the association suddenly received a notification from the "Koksokhimsnabsbyt" Administration in Donetsk categorically "proposing" the conclusion of a contract for the delivery of raw materials not with the phenol plant but with the administration because the realization of that product had been transferred to the sphere of wholesale trade. And the contract was concluded. "Koksokhimsnabsbyt" will naturally now receive the appropriate surcharge with which to "feed the apparatus."

Is it necessary to ask who needed such a profanation of wholesale trade and why? I think the answer will be unanimous: Gossnab and its organs at the local level for the purpose of affirming the might of its apparatus.

The bureaucratic mangle did not spare many. Here, for example, is how it moved with respect to the interests of scrap metal suppliers. Initially, USSR Gosplan's Metallurgical Complex Consolidated Department declared its intention to discontinue the centralized planning of scrap metal procurement. It was assumed that the enterprises themselves would determine the volume of scrap to be collected and turned in.

The contractual campaign started and Gossnab quickly cooled off the extreme hotheads who imagined God knows what. It was said that since economic relations of long standing existed between Vtorchermet [Secondary Ferrous Metals Procurement, Processing, and Sales] and scrap metal procurement agencies (they did indeed exist!), the volume of scrap metal turned in in 1989 must correspond to the level of previous years.

USSR Gosarbitrazh had a directive in store for those who were disobedient. It directed its local organs to force its enterprises to conclude mandatory contracts. And in order to bind their hands entirely, they established a state order for the procurement of scrap metal.

When you think about all this, you almost begin to understand the weight of the burden that is pressing on us. Its name is bureaucratism.

Today we eagerly curse suppliers, calling them monopolists and dictators. And not without grounds. And yet suppliers are also customers. And in this, its capacity, it also experiences the same woes as the others: the shortage of resources and the unrhythmic receipt of raw materials and components.

The odious figure of the supplier is not the problem. The problem is the harm caused by the economic mechanism. It is specifically this mechanism that makes the enterprise the subject of economic legal relationships, that places it in the position of a dictator or in the position of a rightless partner. The dictates of the supplier are not the cause but the effect, the product of peremptory [administrativno-komandnyye] methods of economic management.

The enterprise is not entitled to refuse to fulfill the state order. It is not entitled to unilaterally refuse to conclude a contract on the basis of existing ties even if these ties wind around its neck like a noose. It is not entitled to ignore consumption limits. It is not entitled to request the appropriate legal organ to protect its vital interests. Despite the fact that the law declares many of these rights.

As we see, life does not leave even a small "glade" where the new principles of economic management and new economic relations based on the principles of democratism and self-government proclaimed by the party could gain strength.

Strength is working against perestroyka. And we must have our own strength to fight against this strength. We can "pump up" our muscles with a system of organizational and legal measures. The position of USSR Gosarbitrazh—the highest organ responsible for regulating economic and legal relations—must be completely precise and firm in the system of legal measures. To date, however, it frequently occupies neutral positions and is incomprehensibly silent. Its voice is heard more frequently in "subsidiary works." When, let us say, it is necessary to help Gossnab to tame the obstinates.

This is how we live. Before the seal on the new law is "dry" the legislative organs are using decrees, instructions, and orders to correct, refine, and amend it. With the tacit blessing and sometimes with the help of the organs that are responsible for protecting this very law. How long will this continue?

# INVESTMENT, PRICES, BUDGET, FINANCE

**Taxes on Income, Resources Favored over Fees** 18200341 Moscow PLANOVOYE KHOZYAYSTVO in Russian No 4, Apr 89 pp 41-50

[Article by S. Lushin, doctor of economic sciences and professor: "Proposals on Taxes" (as a formulation)]

[Text] The changes taking place in the country's national economy in connection with the radical economic reform dictate an increase in the role of economic standards regulating the relationship of the economy (enterprises) and state. New demands are being placed on them. Above all these standards must be firm, stable, unified and compulsory.

The increased importance of economic standards in the economic life of the country is also determined by the development of commodity-money relationships. And the result of this is a significant change in the role of the financial system. But its influence on the economy is in need of further improvement, above all in the area of standards. Can the existing forms of payments of enterprises be transformed in the spirit of the enumerated demands? Probably not, for they developed within the scope of the system of administrative planning and must be replaced by new forms of payments conforming to the new conditions of socialist management. It appears that under contemporary conditions the most effective direction for the improvement of the payments of enterprises is a shift to taxes as the basic element in the financial system.

Taxes as a form of financial relations are distinguished from present payments by a number of essential advantages. They are characterized by versatility and can easily be extended to all recipients of income and all property owners. Taxes can regulate social, collective and personal interests as well as the interrelationships of the state with various social sectors of production: national, cooperative and individual sectors. Just as economic interests are mediated and realized as the formation and distribution of monetary incomes, the possibility arises of utilizing taxes to effect the system of interests in the direction necessary for the society.

It must be recognized that the increase in money in our society is to some extent limited by the numerous "barriers" and regulations on the order of the expenditure of enterprise funds (for example: payments of interest on loans must be made only through the fund for the development of production, science and technology). Meanwhile, it is time for the enterprise to decide for what and when and from what sources to pay. In this connection, it appears inadvisable to have the ministry approve the estimates and financial plans of the enterprise. The removal of all kinds of restrictions on the formation and utilization of enterprise monetary resources will give it a clear sense of having its own money, which makes possible the correct matching of the interests of the enterprise and state. Since the income from the work of the enterprise belongs to it, it is appropriate not to have all sorts of arbitrary payments that change yearly depending upon dozens of factors but only stable standards.

In the scope of the general increase in the significance of earned assets, it is expedient to single out profit as the basic object of the taxation of enterprises. Enterprises are now frequently showing interest not in the level of expenditures and profitability (as a rule, this is the result of gross indicators in planning) but in increasing the wage fund. This is cause for concern, because under the conditions of full cost accounting the wage fund appears not only as income but also as an element of expenditures. In the final analysis, the enterprise must be interested in lowering not only physical but also labor inputs.

Only in this event will profit fully reflect the increase in the efficiency of production. The real increase in the role of profit and its transformation into a generalizing evaluation indicator and incentive for the development of the enterprise are also linked with the elimination of the differences between kinds of profit (planned, aboveplan, from subsidiary enterprises, from the production of consumer goods, price markups, etc.) and with the abolishment of all special schemes for its distribution, which supposedly stimulate some processes or others at the enterprise but actually limit its independence in decisions. The degree of freedom in disposing of the profit remaining with the enterprise and the formation of all special-purpose funds and their expenditure must all be decided by the enterprise itself. The realization of these conditions creates a favorable setting for the utilization of tax relations.

The transition from the current system of payments of enterprises to taxes is not a "change of signs" and not a formal act. There is a substantial change in the management process and in the nature of the interrelationships between enterprises and the society (state). The system of "financing" the internal needs of the enterprise and branch is dying away. Counterflows of funds are being eliminated and interbranch redistribution of resources and planned unprofitableness are being eradicated. Instead of the web of interrelationships between the enterprise and the ministry, a simple one-way tax relationship arises. The enterprise pays money into a general centralized fund that provides for the development of the society as a system. These demands of the society on the enterprise must necessarily be unified. Guardianship is disappearing, as is consideration of the specific position of the enterprise and its special difficulties or problems. A principle of equal demands, that is, economic fairness, arises. The society creates equal conditions for all and here is manifested the role of taxes as the means of realizing economic freedom and the democratization of economic life. Taxes establish feedback in the system for the management of the society and a dependence of organs of power, state bodies and soviets upon taxpayers, who can demand an accounting of the funds expended.

Unfortunately, the opinion still exists that socialism does not need taxes and that they must die away. It has been stated that payments to the budget are by no means taxes but special forms of the mobilization of net income. There were justifications for such an opinion. The tax reform at the beginning of the 1930's practically destroyed normal tax relations, replacing them with individual payments at arbitrary rates, which in an extreme case can be called distorted taxes. Previouslyonly taxes on the inhabitants were viewed as true taxes but they were also considered a temporary phenomenon. At the end of the 1950's, an attempt was made to eliminate taxes altogether (taxes on the inhabitants are meant). This attempt failed, which again confirmed the objective nature of this economic category. The correct approach to the resolution of the question is that taxes

are organically inherent in the financial system under socialism. They must be restored in a true form and it is necessary to overcome the antipathy toward them that has developed over a long time.

The task of restoring taxes must be resolved above all in relation to state enterprises. Taxes are introduced by decision of legislative bodies and this performs a social obligation. Precisely taxes and the tax distribution of incomes embody public national economic demands on the work of the enterprise, labor collective and individual worker. It is important to emphasize that the tax establishes a direct link between the society and the individual economic subject. And in this sense, there is no need for any intermediaries in interrelationships between the financial system and the taxpayer. Therefore, in our view, the present system of payments is in need of revision.

At the present time, payment for production resources is the basic form of payments by enterprises. Tax relations arise only in the area of so-called estimated profit. In practice, there are also other forms of payments left over from the past. Inasmuch as taxes are in principle allowed by the current system of payments, can one speak of their "introduction" and in particular of a fundamental transformation of the financial relations between the state and the economy? In our opinion, one can and must.

The fact is that the taxation of estimated profit is not an absolute tax. The very formation of estimated profit is the result not only of the production and sale of commodities but also of already distributed realized profit. The tax no longer influences the immediate results of production and sale. By virtue of the fact that a large part of the profit will be received in the form of payment for resources, the very formation of estimated profit will depend upon the rates of payment for resources, which will be differentiated. This will most likely also lead to a differentiated (individualized) tax rate on profit, which contradicts the very meaning of the tax as a payment that is the same for all. A true tax is levied on the entire mass of profit or volume of income subject to taxation. Consequently, the introduction of taxes for state enterprises cannot be an "improvement" of the taxation of estimated profit but must become an alternative to the current payments for resources, which are now seen as the basic form of enterprise payments to the state budget. For this reason, there need to be reasons for replacing payments for production resources with a system of taxes.

Payments for resources (fixed and working capital) arose as a practical method of collecting income in the scope of the reform in 1965-1967. Essentially their introduction was based on several theoretical positions of that time, according to which it was recommended that payments be introduced for all kinds of resources with the simultaneous introduction of optimum prices for all kinds of output. And the rates of the payments for resources and the optimum prices themselves were supposed to be set

as a result of the building of so-called optimum models for the development of the national economy, which assumed that the society in the person of its central administrative channels knows precisely the volumes and structure of public needs for all types of output and all types of technology as well as the volume and structure of production resources themselves. Under these very strict premises in the scope of the models, the result was the mentioned indices of the rates of payment for resources and optimum prices.

Practice has shown the poor suitability of the proposed theoretical positions and it was not possible to develop the necessary system of prices.

Nevertheless, payments for resources in the form of payment for capitalwere introduced in 1967 and have existed in our economy since that time. Payment for producer goods "was successful" in some sense. It alone became a real economic standard, although it had no stimulating influence on the improvement of the utilization of producer goods. Indeed, the dynamics of the return on investment in the years 1965-1985 was depressing.

In this situation, a single norm of payment for capital was proposed for the entire national economy and its conformity to the efficiency standard. But the tremendous difference between the branches of the national economy with respect to their technical and economic features and level of profitability graphically demonstrated the impossibility of unified standards for efficiency and therefore of unified standards for payments for capital.

The supporters of payment for capital argued its necessity and even size through the existence of interest. But interest reflects the efficiency of money as a specific economic resource but not as specific producer goods in specific branches. These are different economic objects and accordingly the measures of their efficiency are not identical. Practice has taken the only possible approach, that of differentiating standards of payment for capital in different branches, which was manifested not only between branches but also between enterprises within branches. Payment for capital was very quickly transformed into individual payments, so that its stimulating role was practically zero. And this is how it is at the present time.

Under the conditions of the radical economic reform now taking place, new arguments have been put forward in defense of payment for capital. They began to explain its inefficiency through the absence of real cost accounting at enterprises. Because the financial state of enterprises under an administrative system of planning is determined by the ministry (or other administrative channel), the financial plan indicates in advance the sum of payments for capital. In this way, it is transformed into a planning target that is compulsory for the enterprise regardless of its judgments and decisions. This is why there was an increase in surplus capital in the national economy and the enterprises were absolutely indifferent to this.

With the transition to full cost accounting and selffinancing, the enterprises are beginning to distinguish the monetary assets remaining with them from budgetary or ministerial funds, are establishing their own financial plans, and are trying to save on expenditures. Under these conditions, payment for capital must stimulate a better utilization of producer goods and prevent their unreasonable increase. In a management system based on full cost accounting, therefore, it is as if payment for capital is transformed. And, since an independent enterprise in interested in saving resources, it must encourage this saving. But this is only at first glance. In reality, the new conditions of management do not create the preconditions for transforming payment for capital into an effective means of raising the efficiency of the use of capital. The greater the independence of enterprises, including the investment area, the fuller is the cost accounting. If the enterprise carries out technical reequipment of production and builds new shops (and enterprises in the future) using its own resources, then why should it increase payment for capital, when it is spending its own money on new capital?

In addition to this, there are still the previous factors responsible for the ineffectiveness of payment for capital. They include, for example, the pronounced technical and economic differences between branches and enterprises, in which it is impossible to ensure a unified standard payment for capital. It is sufficient to refer to the position of Marx on the different organic composition of capital in different branches, which leads to different standards of profit. This means that the unified rate of payment for capital will always be different in relation to the mass of profit in a given branch. The payment for capital must be differentiated by branches and enterprises. This cannot be avoided, by virtue of which its stimulating effect is lowered dramatically. The very process of differentiation cannot be formalized and will always be subjective in nature and hence the possibilities for relaxing or tightening the standards for payment for capital for purely external reasons.

It should be stressed that the process of the differentiation of payment can be carried out only by the body directly managing the enterprise—a ministry, for example. In this way, the preservation of payment for capital also means the necessity of preserving ministries.

In collecting payment for capital (especially for fixed capital), technical difficulties arise in determining the payment base. Under what valuation should capital be obtained: under the original or the replacement valuation, taking into account wear or without it? Depending upon the choice of some version or another, a large number of stimulating or destimulating factors arise, but

there are not yet any criteria for making the choice and they are hardly possible. For this reason, the differentiation of payment for capital is becoming more and more unavoidable and arbitrary. To preserve a unified payment for capital somehow, its adherents are proposing a sharp reduction of the standard payment to 3 percent or even 1 percent. But why these artificial decisions? And what is the justification for them from the point of view of the standard of efficiency?

All problems in payment for capital are resolved with the transition to taxation. Only with taxes is a single payment rate possible. Being unified by nature, the tax thereby ensures a unified financial standard. It is unified in relation to profit but profit is a generalizing indicator of the work of the cost accounting enterprise. From this results the stimulating effect of the tax on the saving of all resources, on the improvement of the organization of production and labor, and on the course of technical progress. When they speak of the stimulating role of payment for producer goods and for labor and natural resources, they forget that the final efficiency of production depends not only upon production resources but also upon the choice of technologies and organization of production and labor as well as upon a mass of subjective and objective factors that are not included in the list of production resources. But all of these factors are expressed in summary form in profit if it becomes a true evaluating indicator of the work of the enterprise. And in this sense, the tax is doubtless a more effective means of raising the efficiency of production than payments for resources.

A special question is that of the determination of the rates of payments. In this relation, the tax has advantages over payment for capital. The rate of the payment for capital is theoretically determined by the standard for efficiency in the national economy (the version of the minimum allowable efficiency). In reality, no one knows about these things and the rate for the payment for capital is determined on the basis of the amount of profit in the branch or enterprise. The renowned 6-percent payment for producer goods, which has become something like the underlying standard under our conditions, has no theoretical justification. The tax rate does not claim a purely theoretical justification. It is also determined empirically, taking into account the specific circumstances in the economy and in finances. But it does not depend upon the mass of profit; in any event, this independence is significantly greater than for the rate of payment for capital. For the tax can be paid under a single rate by enterprises with average and low profitability, whereas payment for capital cannot.

There are no standard formulas for determining tax rates. This will always be the result of a combination of recommendations from science, the opinon of economic practice, and the experience and art of managing production. Excessively high rates curb the development of production and extinguish economic activity and low

rates do not create the necessary fund for the resolution of social, production and defensive matters. Depending upon the economic situation, the rates can change but not every year, of course.

The unity of rates of taxation do not preclude a system of exemptions and sanctions in the levying of taxes. With the help of tax exemptions, additional incentives can be established for the production and utilization of new equipment, whereby their specificity makes them more effective than payments for resources. Exemptions may be temporary or permanent, just as can sanctions (tax surcharges). The magnitude itself of the rates for the income tax on profit (as for other forms of income) may be proportional or progressive. These matters are resolved on the basis of specific conditions. Practice shows that proportional rates are most effective for promoting the development of production but the levy on profit must not exceed 50 percent (25 to 30 percent as applied to cost accounting income).

Besides payment for capital, they have now begun to utilize payment for manpower resources as well. As a factor stimulating the best utilization of labor, however, it is even less justified than payment for capital. Producer goods, however, have a generalized monetary evaluation that can also be used to some extent as their qualitative characterization. Manpower resources do not have this and it would seem that they should not. The number of employees has therefore become their object. In principle, this is a completely superfluous payment, because the main economic relations between the enterprise and the collective are determined by wages and those of the enterprise and society in the area of the utilization of manpower resources are determined by deductions to social insurance, which must increase after the reform of prices. It is rather obvious that the payment for manpower resources is already redundant. They are trying to attribute to it the indemnification of state outlays for the training of manpower. But this is a very dubious argument. The state has very many different types of expenditures (defense, land reclamation, etc.) Does this mean that each of them must be covered through special payments from the primary income of the enterprise? Probably not. This would excessively complicate the financial system and would sharply limit the possibility for maneuvering resources. And the set standard payment—so many rubles per person reminds one of the most primitive taxation in feudal times. It is best to abandon this payment, integrating it into the general income tax on profit, having provided for the appropriate deductions from it to local budgets, for it is assumed that payments for manpower resources are especially important precisely for them. The advantages of a tax compared with payments for resources are manifested once again. There are several payments for resources but just one income tax. The transition to taxes simplifies financial relations and raises their efficiency.

An independent cost accounting enterprise must strive to reduce the amount of production resources utilized and the more effective its work is, the fewer production resources must be at its disposal. And this means a reduction of payments to the budget. Taxes, inasmuch as they are linked with the summary indicators of efficiency and with profit itself, do not have such limitations but, on the contrary, encourage the enterprise to raise the efficiency of work and ensure the necessary share from this process for the state.

It is necessary to note the close dependence of the tax on profit (income) upon the depreciation standards. Those possibilities for stimulating the enterprise to have an active technical policy that are attributed to the payment for capital are implemented significantly more reliably through the system of rules for depreciation and regulating its standards. Profit and depreciation are to a considerable degree interchangeable in the implementation of investment policy and the income tax rates and depreciation standards must likewise be coordinated. Depending upon the goals of the financial policy, the self-provision of enterprises with financial resources can be achieved through depreciation as well as through the share of profit remaining at their disposal. The systematic resolution of these questions is simplified if the entire amount of depreciation is left as the disposal of the enterprises. The rates of the tax on profit will be directly linked with the total amount of the enterprise's own means.

In the future, it is planned to introduce payments for natural resources as one of the budget incomes. In its economic essence, payment for natural resources is closer to lease or rent payments but in some cases it can also be presented as a tax.

Economic development works out the appropriate forms of realizing national ownership of natural resources and a system of payments for them. It is apparent that payment for natural resources will not become a substantial item of budget income. A significant part of the payments linked with their utilization will go to specialized organizations dealing with the exploitation and conservation of these resources and the natural environment as a whole and will also be turned over to the local soviets.

The experience of other countries indicates that the utilization of natural resources in the sphere of commodity-money relationships influences the differentiation of the incomes of the corresponding economic organizations. For the state (budget), it is simpler to participate in these processes through the taxation of these incomes than to collect rent and other payments directly. In addition, taxes can be utilized to strengthen the conservation of the environment and to make rational use of natural resources.

The transition from a system of payments for resources to a system of taxation must take place gradually. Payments for resources should be recognized as the main form of receiving profit in the budget during the time of the transition period to a new system of management and planning and to an economy of independent enterprises. To encourage enterprises to put the utilization of resources into order more quickly, payment for them is useful. When reserves lying on the surface are utilized, payment for resources loses its importance as an incentive. It is precisely under these circumstances that the stimulating role of taxes increases and in the future the taxation of profit should be viewed as the main form of its receipt in the budget. Unified tax rates that are compulsory for all will become an effective means of influencing the efficiency of all production.

The introduction of tax relations between enterprises and the state would make it possible to regulate the financial problems in the leaseform of organizing production. Rent payments now appear as the sum of everything that the enterprise paid before going over to leasing. It is not difficult to see that in this case, as a result of the special form of economic relations, there is a merging of rent payments proper with the customary payments of the enterprise. The establishment of a tax would lead to a precise delimitation of different economic relations and different payments. An enterprise leased by a labor collective is obligated to pay taxes to the state budget. It must also make rent payments to the government body with which it entered into a lease contract. In the case at hand, it is a matter of a fundamental resolution of the question. It does not preclude the possibility of granting certain privileges to the leased enterprise, especially in the event of its low profitability or a difficult economic and financial state. But this must not be precisely an exemption. If the situation at the enterprise is normalized, it pays the tax as well as the rent. In this case, the latter appears as compensation to the state for changing the status of the enterprise. For it (the enterprise) gets special conditions in the planning of production, formation of income, etc. As a universal payment, the tax applies to all enterprises regardless of their social allegiance, special features of management and organization of production.

The tax, being universal, can be applied in relation to any objects and any subjects. The object of taxation can be not only income but also various property, the sum of economic turnover, individual business operations (issue of shares of stock), etc. By the way, payment for capital can, if necessary, be transformed into a property tax. By virtue of this, the tax is an extremely flexible instrument and the most efficient means of providing the income base of the state budget.

Taxpayers may be state and cooperative enterprises involved in individual labor activity as well as workers, employees and kolkhoz farmers. The taxation standards may be unified for all enterprises and organizations regardless of their social character and they may be distinguished for the purpose of stimulating (or limiting) the development of some type of enterprises.

Many countries have a system for the financial encouragement of the development of small enterprises. This is seen as an important means of combatting the monopolization of the market and as one of the serious measures

contributing to scientific-technical progress. As experience shows, precisely small and medium-sized enterprises are inclined to utilize the achievements of scientific-technical progress. The combination of the universality of taxes and their selectivity and specificity makes them a means of actively influencing all economic, social and ecological processes.

Under the conditions of socialism as well, taxes may be direct or indirect. The incomes of managing subjects and their property are usually the object of a direct tax. The turnover of an enterprise or the volume of sales of an individual commodity are the object of an indirect tax. Direct and indirect taxes complement one another within the scope of a unified tax system. The use of indirect taxes is preferable in regulating popular demand. When all other conditions are equal, indirect taxes provide for the collection of the same sum of money with fewer social costs in comparison with direct taxes. Direct taxes have a greater stimulating effect on production than do indirect taxes. The turnover tax and deductions for social insurance are representatives of indirect taxes in our economy. Both of these forms of payment play an important role in the income of the state and are subject to improvement in the near future.

Because of the importance of their specific purpose, payments for social insurance are included directly in the cost price, appearing as one of the expenditure items, which is customary practice under the conditions of commodity production. The impending reform of prices will substantially increase the share of payments for social insurance. This will correspond to the financial position of the social insurance budget, which until now has been subsidized and will create the conditions for a strengthening of the role of the enterprises themselves in social payments to the population over and above the social development fund.

The raising of the standards for deductions to social insurance must be differentiated by branches taking into account the special features of the reproduction of manpower in each of them (working conditions, etc.). It is necessary to strengthen the relationship between the expenditures and income of social insurance within the framework of the branches and individual enterprises. It is expedient to turn some types of payments (grants and others) over to the discretion of the labor collectives. It is also possible to use the means of the social development fund (payment of travel orders, for example) for the purposes of social insurance in the scope of the enterprises. Along with the means of the enterprises and state, the resources of the population in the form of insurance premiums for a supplemental pension or medical services can also participate in the formation of social insurance funds.

Special mention should be made of the turnover tax. Its prospects are being discussed actively. But it is necessary to make a maximum effort to preserve it. Since in the final analysis it is paid by the population, the decision on

its reorganization is linked with the examination of the general problem on taxation of the population. This tax is now too closely linked with the structure of prices in the system of price setting. Its overwhelming part is levied under the method of the so-called price difference. This means that one cannot change the tax without changing prices and vice versa. For this reason, to break this rigid linkage, the turnover tax needs to be levied in a different way. It is best to do this on the basis of a very limited number of rates determinable directly for turnover and the volume of sales of output. But such a levying of taxes suggests a fundamental change in price setting in our national economy.

The present form of the turnover tax is not the only one possible. In the future, it is realistic to have a transition to a so-called tax on added value, when the object of taxation will not be the entire gross turnover but in fact the standard net output, which better reflects the contribution of the enterprise to the volume of production and its efficiency. It should be stressed, however, that it is not necessary to calculate standard net output in levying this tax. The transition to a tax on added value has great significance for the activation of foreign trade.

An integral part of the tax system is taxes on the income of the population, the role of which is changing significantly at the present time. The radical economic reform is sharply increasing the economy activity of the working people. New forms of applying labor are arising and progressing rapidly, the system of its remuneration is changing, and the importance of the rigid centralized regulation of wage rates and salaries is declining. The money income of the population is increasing noticeably. It is becoming more differentiated. In this connection, in our view, taxes (on the personal income of working people and the general wage fund in the scope of the enterprise and organization, for example) should be recognized as the most appropriate means of regulating the income of the population. Provision can also be made for a substantial increase in tax rates in the case of the rapid (abrupt) increase in the wage fund that is observed in certain instances (cooperatives, branch research institutes, planning institutes and others).

As for personal income, it is expedient to utilize a progressive tax scale that makes it possible to combine stimulation of an increase in labor productivity with a reasonable limitation of the excessive increase in income. The size of the progression can be determined only on the basis of a careful study of the matter. In any event, references to the example of other countries, where there has been a drastic reduction of the progressiveness of the taxation of income, must be looked at very critically. These countries have a completely different economic situation and a different social and psychological attitude toward the differentiation of the income of individual citizens. Under our specific conditions, it is quite possible to set up an adequately perceptible progression of the taxation of personal income.

The improvement of the taxation of the population presupposes a complex of measures, essentially the implementation of a tax reform that must include questions in the systemization and ordering of taxes and their unification, that is, the extension of identical principles of taxation to all population categories. Such a reform must be carefully prepared and linked without fail to retail price reform so as to ensure a single approach to coordinating relations between the state and population.

Tax policy is closely linked with prices, depreciation and the formation of the income of enterprises and the population. The extension of commodity-money relations, in raising the role of the financial and credit system in the regulation of production, makes it possible to utilize different combinations of the enumerated factors depending upon the specific situation. The comparative dynamics of prices and income is the most complex question in the transition from administrative management to economic methods of managing the economy. As a rule, the development of economic initiative leads to an increase in income. Because of the shortage of many commodities and the more rapid growth of income, however, an inflationary situation often arises. In these situations, taxes can be an adequately effective factor in restraining inflation. It is a matter of the progressive taxation of superprofit, superwages and in general all superincome.

The raising of taxes has a certain advantage over an increase of prices, because it can prevent a new loop in the inflationary spiral. It is possible through a progressive tax to weaken the inflationary process and, in addition, to diminish interest in higher prices by collecting a larger part of income from these higher prices. The lowering of taxes has a powerful stimulating influence on the course of economic processes, especially with the encouragement of capital investments, the development of new technology, etc. But such effects are achieveable only under a well-tuned tax system that can react flexibly to the dynamics of income.

It is necessary, of course, to have a specific justification for each case of the utilization of taxes, because general recommendations are by no means always justified in the economy. But one can say with certainty that at the present time the improvement of distribution relations is largely determined in all links by a transition to taxes as the leading form of financial ties.

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## Leases, Stocks Recommended As Alternative to Bank Loans

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[Article by V.I. Tarankov, candidate of economic sciences, under "Problems and Opinions" rubric: "Possibilities for the Utilization of Some Nonbank Forms of Credit"]

[Text] In the period of the implementation of the radical economic reform and the reconstruction of the banking system of the USSR, an objective need is arising for changes in the area of credit. The task is to make the forms of credit relations conform to the new economic conditions, which are expressed in the active development of commodity-money relationships and democratic methods of managing the economy that presume the granting of more independence to the participants in the reproductive process in the selection of the ways and means for the effective performance of their economic and social functions. In this connection, one of the directions in the restructuring of credit relations is to increase the role of nonbank forms of credit.

#### Credit-Leasing and Commercial Credit

In the economic literature and in particular in the pages of the journal DENGI I KREDIT, an active discussion has begun on the question of the fate of commercial credit and the prospects for its development in the socialist economy. As it appears, a very fruitful position is that "it is necessary to restrict somewhat the monopoly of bank credit in the satisfaction of the needs of enterprises for temporary financial aid.... Under the conditions of full cost accounting and the limitedness of credit resources, commercial credit can normalize credit relations and improve the competitiveness of creditors." <sup>1</sup>

The development of other nonbank credit granted in the form of money or commodities must also contribute to the normalization of credit relations.

Commodity credit exists not only in the form of commercial credit. The practice in the capitalist countries, Hungarian People's Republic and People's Republic of Bulgaria bear witness to the rapid development of such a form of credit relations as leasing. Leasing is the long-term renting of machinery, equipment, transport means and production facilities. According to Western economists, from 6 to 20 percent (depending upon how wide-spread these operations are) of the annual requirements for investments in fixed capital in developed capitalist countries are covered through leasing.<sup>2</sup>

In the USSR, in connection with the restructuring of the economic mechanism, the transfer of enterprises to cost accounting and self-financing, and the development of cooperatives, lease relations are being applied more and more extensively in agriculture, industry, trade and other branches of the national economy. It is important to emphasize that in our country lease relations do not always appear in the form of credit relations, which is dictated by the specific nature of credit as an economic category. In the first place, credit relations, as a rule, are linked with movement of money and goods from hand to hand. Since land in the USSR is not the object of buying and selling, the relations arising in agriculture in connection with its leasing, for example, cannot, in our view, be viewed as credit relations. In the second place, a condition for the rise of credit is the existence of possessors of goods who oppose one another as owners, legally independent entities prepared to enter into economic relations. In this connection, such a widespread type of lease relations as, for example, the leasing by the labor collective of a factory, plant, etc. of part of the equipment, machinery and mechanisms of the enterprise is also not credit. Credit-leasing arises only among legally independent entities and in connection with the transfer of the product of labor that is the subject of buying and selling.

The leasing form of credit provides that the borrower receives value in the form of goods for temporary use. In this respect, the form of the loaned value in creditleasing is somewhat similar to commercial credit. But there are fundamental differences between them. Commercial credit presupposes an interrelationship between the trade and credit transactions. Here the conclusion of the trade (commercial) operation coincides with the beginning of the credit transaction, which, in turn, will be completed when the borrowing enterprise pays back its indebtedness on the loan. The leasing operation is based directly on the credit transaction or credit-leasing contract and is not governed by a document for the purchase and sale of goods.

The appearance of the need among the participants in the reproductive process for commercial credit and credit-leasing is characterized by general and specific causes. In both cases, it is more advantageous to the borrower for a number of reasons to resort to the given commodity forms of credit than to receive a monetary loan (a bank loan, for example) for the immediate payment of physical assets. Thus, the receipt of a bank loan may be complicated in periods of credit restrictions or in cases when the financial situation is not stable from the point of view of the bank.

The borrower's need for commercial credit is dictated by his desire to receive the right of ownership over the use value of commodities that he cannot pay for at a given moment. Relations with respect to credit-leasing are governed by other reasons. The lessee may not be striving to acquire ownership of the use value of physical assets because of a temporary need for it. Especially important is the circumstance that under the conditions of the rapid development of the scientific-technical revolution and the accelerated obsolescence of equipment, it becomes more advantageous for the enterprise to renew it regularly through the borrowing of fixed capital rather than through purchases, which require major one-time capital expenditures through the enterprise's own assets and money loans and, consequently, limit the magnitude of the financial resources that the enterprise channels into other purposes—for the needs of the social development of the labor collective, for example.

Commercial credit and credit-leasing differ in the physical form of the object of the loan. The enterprise grants commercial credit to another enterprise in the form of the deferment of payment for the means of labor (machine tools, machines, mechanisms, etc.) and the subjects of labor (raw materials, supplies and fuel).

In leasing operations, only the means of labor are the object of the loan. Regardless of what is sold under the conditions of deferred payment—the means or subjects of labor—commercial credit is short-term in nature. The credit-leasing contract can be long-term, medium-term or short-term.

Finally, commercial credit is provided and recovered in commodity and monetary forms, respectively. In contrast, credit-leasing relations are characterized by the commodity form of transaction. Depending upon the conditions of the contract, the credit can be liquidated either through the return of the asset in the same physical form to the creditor or through lease payments in amounts that, in the final analysis, give the borrower the possibility of purchasing the leased physical assets at their residual value.

Two stages can be distinguished in the development of the leasing form of credit in our country. In the first (current) stage, diverse state and cooperative enterprises provide physical assets under credit-leasing conditions. Each such operation is dictated by the possibility of a production enterprise performing the functions of a lessor. This depends upon whether it has fixed capital that can be leased and whether there is a demand for it by other state or cooperative enterprises or by persons engaged in individual labor activities. In the current stage, as a rule, the subject of the lease is permanently or temporarily inoperative fixed capital, ineffective obsolete equipment, transport facilities and, less frequently, highly productive equipment (basically computers).

In the future, the necessity of modernizing production and of introducing new labor-saving technology (robots and computers), the reduction of the service life of equipment, its complication and increasing cost, and the genuine development of cost accounting and self-financing in the national economy will inevitably dictate the necessity of a qualitative improvement of leasing operations, which will lead to a change in the appearance of the subjects of these operations and of the object of the leasing transaction. The role of lessor must be played by cost-accounting leasing enterprises and organizations having strong financial resources and the support of banks for the purchase of technologically complex and expensive specialized high-class equipment for the purpose of providing it under credit-leasing conditions to profitable enterprises in the national economy. And the establishment of specialized leasing organizations in our country is the content of the second stage in the development of credit-leasing.

It is important to emphasize that leasing companies have become widely recognized in the United States, the countries of Western Europe, Japan the South American states, Australia and New Zealand. The work of the leasing companies is not limited to a national scope but is attaining an international character. A specialized leasing firm is functioning in Bulgaria (Bulgarleasing).

The establishment of a network of leasing enterprises and organizations in our country may become a flexible mechanism for ensuring production enterprises the long-term leasing of machinery and equipment for the renewal and expansion of production without the necessity of purchasing them directly from the producing enterprise. Such an alternative means of acquiring fixed capital makes it possible to limit the dictates of the producer, to weaken the position of the seller's market and to facilitate the formation of a market for the means of production.

The restructuring of the economic mechanism in the USSR, the development of decentralized democratic methods for the management of economic processes and the transfer of enterprises and organizations to cost accounting and self-financing are also creating favorable conditions for the development of such a form of financial and credit relations as the issue of securities by enterprises and organizations.

#### **Enterprise Stocks**

In accordance with the decree of the USSR Council of Ministers dated 15 October 1988 "On the Issue of Securities by Enterprises and Organizations," enterprises and organizations that have been transferred to cost accounting and self-financing can issue two kinds of stocks: stocks of the labor collective distributable among the members of the collective and stocks of enterprises (organizations) sold to other enterprises and organizations, voluntary societies, banks and cooperative enterprises.

Under present conditions, the granting to economic organizations of the right to issue stocks is attaining special significance. Many enterprises (organizations) have obsolete equipment and are experiencing an extremely acute need to renew operative fixed capital, for which they need significant sums of money to finance expenditures of a capital nature. In connection with the reduced area of application of uncompensated budgetary financing of enterprises and the renunciation of the practice of the branch redistribution of financial resources, economic organizations can advance capital investments under a shortage of own sources only through loans.

At the present time, the possibility of economic organizations to attract an increasing volume of long-term and short-term bank loans is significantly limited because of the policy of credit restriction being carried out by state banking institutions. At the same time, the country has a significant number of enterprises that do not utilize bank loans and that have large monetary savings of a long-medium- and short-term nature. The population has significant savings.

Thus, the subjects of the reproduction process occupy a heterogeneous position in the socialist market for credit resources. The tremendous demand of some enterprises and organizations for monetary assets is accompanied by the systematic limitation of the supply of credit resources on the part of state banking institutions and by the existence of the real possibility for a number of economic organizations and the population of acting in the role of investors.

Under the given conditions, the placing of securities by enterprises can mobilize significant monetary assets that cannot be obtained in the form of direct bank loans or this is inadvisable. Such operations will have a favorable influence on the establishment of a money market and its normal functioning. The placing of securities among the population, enterprises and organizations will make it possible to transform small dispersed money accumulations of a short- and medium-term nature into long-term resources that the emitter of securities can utilize for the financing of capital investments. This, in turn, will contribute to the decentralization of investment policy.

The shares of labor collectives and enterprises are of interest to potential investors—economic organizations and the population having money savings that can be loaned out. At the present time, there is still a practice in which enterprises keep temporarily available funds of a short-, medium- and long-term nature in bank accounts without receiving money compensation for this or receiving it in quite modest amounts set at the discretion of the bank rather than on a contractual basis. In so doing, the banks do not take into account the influence of the inflationary process, the operation of which leads to a reduction of the real value of accumulated means.

For some enterprises, the shortcomings in the work of banks to stimulate the increase of credit resources in the form of money savings of economic organizations as well as the shortage of a number of goods intended for production use produce a striving for the excessive acquisition of physical commodity assets, above all acutely scarce kinds of raw materials, supplies, mechanisms and fuel. In establishing reserves for the future, they are striving to reduce losses from the inflationary process in the current period and in the future in connection with the possible further increase in wholesale prices for the means of production. In the course of such operations, the enterprises are making inefficient investments that lead to an increase in above-standard reserves, to a weakening of the policy of economy and to an increase in the production cost of finished output.

The issue of securities-stocks creates an alternative means for economic organizations to utilize resources, a means that permits them to avoid losses from the inflationary depreciation of monetary savings or from the irrational investment of money assets in above-plan reserves. It is obvious, however, that the acquisition of shares gives a perceptible advantage to the investor holding securities at a definite level of dividends. The economic interest of the shareholder is guaranteed in the event that the dividend is higher than the realized income (taking into account the influence of inflation)

obtained in a bank for the holding of money assets. The investor must also consider the fact that shares are less liquid than assets in a bank account. Because of a number of factors, the price of a share can fall sharply and in reselling the share the seller (enterprise) will lose part of the invested assets. The resale of securities requires not only the expenditure of a certain amount of time but also the payment of a commission to the bank for its mediation in the specific operation.

The better organized the system to protect the interests of holders of securities, the greater the striving of legal and physical persons to purchase stocks. At the present time, the system provides for the following measures. In the first place, to receive permission to issue shares intended for free sale, the enterprise (association) presents an application and several other documents to the servicing institution of the bank. The bank department analyzes the financial position of the enterprise, its solvency, the liquidity of its balance and possibility to pay income and sends its conclusions to the institution of USSR Gosbank, which within 30 days gives the enterprise permission to issue shares or a well-founded refusal of the right to carry out such an operation. The indicated system must preclude the possibility of the emission of inferior securities, that is, stocks for which the payment of income is improbable.

The role of the indicated measures may be raised substantially under the condition of the elaboration and application of criteria for the liquidity of the accounting balance of the enterprise and for the overall creditworthiness of the emitter. Whereas such criteria have been precisely worked out in the question of the liquidity of the balance of a bank (cooperative, joint-stock), no mechanism for evaluating the liquidity of economic organizations is yet being applied in practice. In this connection, a rule under which the right to issue securities is granted only to economic organizations that are absolutely credit-worthy must be an important component of the system for protecting the interests of holders of securities. Brief information on the assessment of the credit-worthiness of the emitter should be published in national and regional statistical reference books.

Secondly, one of the rules for the issue of securities provides that all shares emitted by enterprises be covered by money assets and property that by law can be subject to recovery. This position, which aims at protecting the interests of holders of securities, needs to be defined more specifically. It is difficult to explain from it the temporary aspect of the action of the measure under discussion, that is, when this position must be observed-at the moment of emission, during the entire period of the circulation of the securities or when the emitter redeems the shares. If it a matter of the first (emission), then it becomes necessary to regulate the maximum allowable limit for the issue of shares-the amount of the emission must be limited by the indicated coverage. If the cited position relates to the entire period of the circulation of the securities, then it is necessary to specify:

- —the system for the calculation of the coverage of shares, keeping in mind that the emitter, as a rule, has other kinds of obligations (on bank loans and to suppliers; to financial agencies, workers and employees for wages);
- —the name of the organization that must determine the level of coverage of shares (the emitter or servicing institution of the bank or cost-accounting organization engaged in the evaluation of the quality of securities);
- —the scope of activities of the emitter in the event of the revelation of uncovered shares;
- —the rights of the holders of uncovered securities.

If the indicated rule on the coverage of stocks is related to their redemption by the emitter, then a need arises for a greater specification of the rights and obligations of the participants in the process under discussion. In particular, it is extremely important for the holder of securities to know his rights under the conditions when the emitter is insolvent not only in relation to him but also to other creditors—the bank and suppliers. Each of them must clearly understand the system for the borrower to liquidate his debts.

World practice indicates that the systematic receipt of objective information on the state of affairs at the emitting enterprise and, the main thing, the existence of means for the investors to exert a positive influence on the economy of the enterprise for the purpose of ensuring a stable level of dividends helps to protect the interests of shareholders.

Shareholders who are workers in the emitting enterprise have the real possibility of seeing "from the inside" the state of its economic and financial activities and ways to increase the profitability of production. In this way, by raising their own labor initiative and enterprise, they can influence the final results of the work of the enterprise and, consequently, the level of the payment of income on shares. This establishes favorable conditions for the realization and protection of the economic interests of the member of the labor collective holding shares. A certain significance also attaches to the circumstance that the conditions and system for the issue of the securities in question are reflected in the collective agreement. On the other hand, the shares of the labor collective are issued as nominal shares and are not subject to being transferred, given away or resold. Therefore, when there is a decline in the effectiveness of investments in securities, the member of the labor collective is deprived of the possibility of getting rid of them before the time of their redemption stipulated in the collective agreement. In this case, the keeping of securities in the hands of the enterprise worker becomes disadvantageous for him and attains the nature of noneconomic coercion.

Unfortunately, the position (temporary) on the system for the issue of securities does not stipulate the conditions for the provision of information on the state of affairs of the emitter to holders of shares of enterprises. In our view, it is necessary to review the rule under which the emitter is obliged, at the request of the investor, to send out a brief report on its economic and financial activities a specific number of times a year (quarterly or semiannually). Glasnost in the relations between the emitter and investor will help to strengthen the confidence of all subjects of reproduction in securities as an advantageous form of investing assets.

The position (temporary) on the system for the emission of securities notes that the emission of shares of enterprises does not change the status of enterprises and is not a basis for their transformation into a joint-stock company. The possessor of the share is named the "holder of the share" and does not have the status of stockholder. Accordingly, the holder of the share does not receive the basic rights of the stockholder that exist in world practice" a) the right to unite in an organization of shareholders of the given enterprise, that is, in a meeting of shareholders; b) the right to influence the economic and financial activities of the enterprise through participation in this meeting with a number of powers—appointment (removal) of the enterprise management, the determination of its economic and financial policy, the organization of the review and control of the activities of the enterprises, and others.

In other words, the shares of the enterprises initially do not give the "right to vote" to their owner and for this reason this form of security has by nature the characteristics of bonds. Having mobilized money assets through the emission of shares, the economic organization remains outside the sphere of managerial influence on the part of the holders of securities. In this way, the economic organization—a state enterprise (association), for example—retains the existing structure of management. The emitting enterprise does not have the need to write into it new management bodies representing and realizing the interests of shareholders, which would be a very painful change both for the enterprise itself as well as for its superior organization. In addition, it is possible that such a change would not be that significant at state enterprises and in organizations where the sum of own sources for the formation of fixed and working capital is many times greater than the value of shares placed.

At the same time, the established rules mean that in the event of a worsening of the results of the economic and financial activities of the emitting enterprise the owner of securities does not have the possibility of taking part in the work to improve matters at the enterprise and thereby to protect his own economic interests. In such a situation, the investor is forced to resort to one of two possible actions: either with the help of a mediating bank carry out a massive disposal of shares in the securities

market or offer them to the emitter for payment, which is possible only with the advent of the stipulated time for the redemption of the shares.

Both versions are quite undesirable. The increase in the supply of shares of a specific enterprise can lower their price and therefore their resale becomes a very disadvantageous operation. The flooding of the market with shares of low quality is capable of undermining confidence in such a form of financial and credit relations as the investment of assets in securities. The second course, that of presenting the shares for redemption, can lead to the insolvency of the emitting enterprise and deprive it of opportunities for the rapid fulfillment of its obligations to various creditors.

In our view, if the enterprise emitting securities does not want the interference of shareholders in the management of its economic and financial activities, then it is expedient for it to issue not shares but bonds. Precisely the issue of bonds is a form of mobilizing money assets, the use of which blocks both the transformation of the enterprise into a joint-stock company and the granting of the right to vote to their owners.

#### **Bonds of Enterprises and Organizations**

If for the issued shares of some enterprise the dividends are small, decline or cease to be paid, the purchase and retention of such securities is an economically disadvantageous form of investment. In such a case, the interests of the investor will be met by a form of securities that provides for the urgency of the return of funds and a fixed rate of interest, that is, bonds, which in this situation are the most attractive form of placing assets with less commercial risk for the investor.

Credit in the form of the bonds of enterprises and organizations existed in prerevolutionary Russia and in the USSR in the 1920's. This form of credit is actively applied in the capitalist countries as well as in the Hungarian People's Republic. In Russia, the second quarter of the 19th century and the beginning of the 20th century were characterized by the vigorous development of operations for the issue of bonds. The emitters were the state, banks, railroad enterprises and various joint-stock partnerships for trade and industry, insurance, steamships, etc. In the period under discussion, bond law developed actively. It provided, in particular, for the following positions.

In the first place, a joint-stock company could issue bonds only if its statute includes the corresponding paragraph that gives it the right of emission. In the second place, the bonds were allowed to be quoted in the market no sooner than after confirmation of the report of the company for the first year of operations. Thirdly, the right of emission was extended only to companies that had a minimum fixed capital of 600,000 rubles and the limit for the issue of bonds by one company was 300,000 rubles. Fourthly, the bond capital of the enterprise could

not exceed 50-60 percent of the joint-stock capital. Fifthly, bonds were supposed to be issued in such a way that they were covered by real estate. And the amount of the emission could not exceed 60-100 percent of the value of the buildings or immovable property belonging to the company. Sixthly, the bonds were issued exclusively to the bearer.<sup>3</sup>

These and a number of other positions were intended to regulate the rights and obligations of the borrower and creditor and to protect the interests of each of the parties to the transaction. The development of a securities market in prerevolutionary Russia was accompanied by the appearance of a significant number of projects for the reform of legislation in the area of bonds and by the active discussion of their content by Russian economists.4 Many of the projects provided for quite interesting proposals, in particular on the establishment of extensive glasnost in the issue of bonds, since the legislation in Russia, in contrast to the practice in most other countries (England, France, Italy) did not provide for the principle of publicity in the organization of bonds—the provision of investors (bondholders) with information on the economic and financial position of the emitter. In prerevolutionary Russia, many of the projects were not realized in practice. Because of the permanently restricted state of the money market in the country, which was characterized primarily by the offering of short-term resources, the enterprise bonds as an instrument of long-term credit attained a relatively modest propagation in the country in comparison with other developed states. At the same time, the results of a retrospective analysis of prerevolutionary economic practice and of a critical interpretation of the heritage of Russian economic thought (as well as of a study of foreign experience) can be considered in the elaboration of a contemporary economic and legal base for loans of Soviet enterprises.

The regeneration of this form of credit in the USSR can become an additional means for the further extension of democratic principles in the management and development of the initiative of labor collectives. Along with the issue of shares, enterprises will be able to resort to the emission of bonds as a means of mobilizing resources necessary for production and social development. In so doing, for the purpose of developing economic initiative in the area of financial and credit operations, the economic organizations should be given the possibility of independently determining the type of securities that is most advantageous for them to issue in accordance with the nature of the need for additional funds and the state of their own finances and the country's money market.

The bond form of credit includes a number of attractive features for the borrowing enterprise. Through the placing of bonds, the economic organization can mobilize resources both for the coverage of current expenditures for operations as well as for capital investments. At the same time, enterprise bonds should be viewed primarily as a supplement to borrowed resources received in the

form of bank loans. Even in developed capitalist states, the enterprises cover an insignificant part of their need for borrowed funds for investments through bonds. In maneuvering at their own discretion the fund for the development of production, science and technology and borrowed bank funds and resources received through the placement of bonds, the socialist enterprise can accelerate the implementation of large-scale measures for the reconstruction and expansion of operative production and for the qualitative renewal of fixed capital.

Bonds can provide the labor collective of the enterprise with additional means for social development. It is primarily a matter of those enterprises that have lagged behind in the development of the material base of the social sphere and are not able to eliminate this lag quickly through their own resources—the social development fund. The issue and sale of bonds can help the enterprise to mobilize deficient resources for the financing of the construction of dwelling houses, children's institutions and other facilities for social development. Their accelerated introduction into operation will improve working conditions, activate the human factor and, in the final analysis, raise the efficiency of production.

Bonds are a promising form of credit for large enterprises and organizations of the nonproduction sphere, in particular for enterprises that provide the population with diverse services of a domestic nature. Some of them are now being transferred to full cost accounting and self-financing. An important condition for raising the profitability of the enterprises under discussion is the increase in the level of automation and mechanization of work and the reduction and, in the long term, elimination of unskilled labor. Borrowing through the sale of bonds gives the necessary means for the technical reequipment of these enterprises.

Bonds are an advantageous form of credit for profitable enterprises, which can make loans with the payment of an interest rate lower than the income paid on shares. As was noted, the placing of bonds does not include the threat of involving their holders-creditors in the management of the financial and economic activities of the borrower. Since the bond expresses relations with respect to the reciprocal movement of the loaned value, the borrower must ensure the full observance of the interests of the buyer of the bond. In this connection, it is expedient to grant the right to emit securities only to those enterprises and organizations that meet the requirement of credit-worthiness and, in particular, that have a liquid balance structure.

In prerevolutionary Russia, in contrast to the practice abroad, bonds of local authorities were relatively poorly developed. In the United States, emitters of bonds are not only the government and federal institutions but also states and local authorities, which issue so-called municipal securities. Municipal bonds issued in different forms in the United States are secured either through taxes

raised by the emitter, which guarantees the liquidation of the securites, or through income as foreseen, for example, in the issue of bonds of municipal authorities and enterprises for the supply of water and electricity. In 1982, the so-called "municipal certificates" appeared in Hungary. Local soviets began to issue them for the purpose of mobilizing funds for the construction of social facilities. All securities of Hungarian enterprises and local soviets were guaranteed by the government until 1 January 1982. They then introduced a system providing for the receipt (purchase) of guarantees from Hungarian commercial banks, which protected the interests of bondholders and increased the demand for securities.<sup>5</sup>

The foregoing indicates that bonds can be a tool not only of enterpriseloans but also of different kinds of state credit. The development in the USSR of decentralized forms of managing economic relations, in particular in the territorial aspect, and the work to transfer union republics, oblasts, rayons and cities to cost accounting and self-financing create additional incentives for the utilization of state decentralized bonds. In this way, republic, oblast, rayon and city Soviet authorities can mobilize funds needed for the planning and development of urban and rural rayons and for the construction and reconstruction of facilities in cultural, educational and sports complexes (paid swimming pools and very well-equipped gymnasiums) that broad sectors of the population could utilize.

For the purchaser of such bonds, the connection between the investment of money assets and the result of their utilization by the borrower will be very visible and tangible. This will advantageously distinguish local emissions of bonds from national emissions and help in the active formation of regional money markets. The development of such a system for the mobilization of monetary resources will facilitate the introduction of cost accounting on the scale of the republic, oblast, rayon or city and will also reduce the demand of the indicated authorities for the means allocated from the union budget for the social development of the corresponding region.

The course of developing a securities market brings up the question of whether enterprises and organizations can place bonds and stocks among the population. The experience of Hungary shows that by mid-1988 a total of 350 different denominations of different securities had been issued for 40 billion forints, half of which were sold to the population. The number of citizen investors is about 200,000 and the average size of the investments is 100,000 forints (6,000 rubles), which is relatively little based on Hungarian prices.<sup>6</sup> In our country, the population has the possibility of putting money savings into deposits and of utilizing them for the purchase of certificates of the Savings Bank or state bonds. At the present time, the labor collectives of enterprises have received the right to issue shares and to disseminate them among the members of their labor collective.

At the same time, a significant part of the population is deprived of the opportunity to acquire shares and to receive dividends and is tied to traditional forms of organizing savings. Under the conditions of the inflationary process, this leads to the increased pressure of solvent demand on the commodity market, to its disorganization and to an aggravation of the imbalance between commodities and money.

Granting the population the right to purchase the stocks and bonds of enterprises and organizations would, it seems, make it possible to reduce the residue of cash held in the hands of the population, to reduce temporarily the disproportion between solvent demand and its commodity coverage and, in part, to eliminate the losses of the population from the influence of the inflationary process. In so doing, in our view, preference must be given in the first stage to the sale to the population not of stocks but of bonds of enterprises and organizations. Although they yield a fixed income, the state or banks (state or commercial) should guarantee their payment to protect the interests of the citizens.

In the event that the state allows the population to acquire securities, the income from them should be paid through the banks with the retention of the corresponding taxes. In so doing, an extremely complex but, in our view, essential task is to establish a mechanism for taxation that would guarantee social fairness and the legal protection of the owner of the securities.

The development of bonds of enterprises and organizations will exert a diverse influence on the costaccounting interests of the banks of the USSR. The system for the issue of securities foresees that on a commission basis the banks provide emitting enterprises services in the dissemination of their shares and to the owning enterprises in the custody, receipt of income and resale of the securities in question. The new operations of the banks are a source of income and increased profit—the main evaluating indicator of credit institutions. In carrying out these operations, the banks are transformed into institutions most informed about the real and forecast size of dividends on the shares of some emitting enterprise or other. In using the information on the changing conditions in the primary securities market on a day-to-day basis, the banks can profitably invest part of their own means in the purchase of shares and resell them at a profit on behalf of the customer.

The banks can also obtain the indicated income from operations with the bonds of enterprises and organizations. The most important organizational prerequisite for the successful work of the credit institutions in the sphere of the primary securities market is the training of bank specialists whose competence is the sale, purchase and resale of stocks and bonds. The development of the operations in question requires the most active use of computers. The means of computer technology must

continuously accumulate different information characterizing the state of the securities market and make it possible to utilize it effectively in the work of the banks.

The active development of the securities market will make it possible to reduce the demand of enterprises and organizations for bank credit, which is of considerable importance in today's conditions in which the banks are pursuing a policy of credit restrictions. At the same time, this will lead to a certain outflow of credit resources from the banking system, which can complicate the work of the banks.

An examination of the specific nature of nonbank forms of credit shows that each form of credit relations has only its inherent means of realizing particular economic interests of the subjects of production. This permits one to conclude that the greater the variety of forms of employing credit, the more consideration is given to the material interests of subjects of reproduction having to do with the economic realization of ownership. In the final analysis, this is one of the most important conditions for increasing the role of credit in the development of the socialist society.

#### **Footnotes**

- 1. DENGI I KREDIT, No 11, 1988, p 31.
- 2. FINANCY SSSR, No 1, 1988, p 70.
- 3. For more detail, see: G.M. Kolozhnikov, "Obligatsii torgovo-promyshlennykh aktsionernykh tovarishchestv. Chast pervaya. Usloviya vypuska obligatsiy" [Bonds of Trade and Industrial Joint-Stock Partnerships. Part one. Conditions for the Issue of Bonds], Tomsk, 1912, pp 125-136.
- 4. G.M. Kolozhnikov, op. cit., pp 181-337.
- 5. PRAVDA, 27 January 1989, p 3.
- 6. Ibid.

#### INDUSTRIAL DEVELOPMENT, PERFORMANCE

Old Equipment, Unsafe Conditions in Urals Ferrous Metal Industry

18200353 SOTSIALISTICHESKAYA INDUSTRIYA in Russian 11 May 89 p 2

[Article: "This Ferrous Metallurgy"]

[Text] A decree issued by the Central Committee of the All-Union Communist Party (of Bolsheviks) on 25 January 1931 proclaimed: "The construction of the Magnitogorsk plant must become a practical school for the creation of the new methods and forms of socialist labor, technology, and training of cadres for the further industrialization of the Union."

The flagship of Soviet metallurgy was from the very outset conceived as the ne plus ultra.

World Giants of the Urals, a pamphlet dating back to those years, proudly noted: "The Magnitogorsk plant is the largest enterprise in the world. It will provide the country with 2,880,000 tons of metal a year. This is three times more than total Urals output in 1930. But that is not all. Productivity of the Magnitogorsk plant will be expanded to four million tons—more than tsarist Russia's total output in 1912. The only plant in the world to date that can compete with the Magnitogorsk plant in size is the Gary plant in America; it produces about three million tons a year. But that plant was under construction for 12 years...."

The Magnitogorsk giant was built in a shorter time at the price of the incredible efforts and deprivations of the average builder. Magnitogorsk will be 60 years old this year. The giant's capacity has grown many fold and it now produces 16 million tons of steel a year. It has no rival. But let us recall the supertask the party initially assigned to Magnitka: to be the model of socialist labor, technology, and cadre training. The people's diligence and their dedication to their combine were attested to by the local saying: "We'll give our all. We won't let Magnitka down." Memorial plaques and signs on many of the machines exhorting higher metal production are reminders of the heroes of labor, the records, the extreme tensions of the time, and the heroic exertions of the people.

But it is a terrible thing to walk the grounds and visit the shops of the giant today. It is difficult to breathe. It is painful to see how arduous and dangerous the metal worker's toil is at the end of the 20th century. While more than half of the equipment at the combine is entirely worn out but is still operating beyond its normal service life. Combine specialists have determined that 36.3 percent of the machines do not correspond to the modern level and should be replaced; that 57.8 percent correspond only to domestic standards and should also be modernized; and only 5.9 percent are at the level of the world attainments. It is unlikely that the replacement of open-hearth furnaces by converters as a result of perestroyka will cause the world to gasp with envy.

Magnitka leads a difficult life in its self-denial. But it is specifically because of its worn-out, worthless equipment that this production facility realizes its extremely high profitability—over 30 percent. The combine's annual profit is in excess of 875 million rubles. Does the Magnitogorsk Metallurgical Combine exist alone in the Urals with its metal that is fatigued and worn-out to the extreme?

The ancient Zlatoust plant in the northern part of Chelyabinsk Oblast is an assiduous steel producer. It fills its orders without interruption and realizes a profit of about 50 million [rubles]. According to the 1986 inventory, 95 percent of its machinery and equipment have

exhausted their service life. Their capital repair costs comprise 95 percent of their residual value. Pity the person who has to operate these machines. But it is no easier for people who live in the vicinity of the plant: plant specialists estimate that the ecological damage from metallurgical production is 16 million rubles a year.

Furnaces and machines that were put into operation at the Chelyabinsk Electrometallurgical Combine in 1930 have an astonishing minus valuation (which to be sure is not unknown in world practice): furnace No 7 had a book value of 230,900 rubles; depreciation exceeded 415,000 rubles; the residual value is -184,000 rubles.

Oh you dead furnace soul, how much longer will you prolong this period in your irrational life?!

We could long continue to keep this count on half-dilapidated shops and infirm and exhausted machines. Figures on the Chelyabinsk Piperolling Plant, the Satka "Magniyezit" plant, and the Asha Metallurgical Plant are by no means any more comforting. We were stopped by a phrase uttered by a party worker in the Chelyabinsk Metallurgical Combine: "Not only people and furnaces work until they are worn out. Right down to the plating." A terrible shifting of emphasis: why do we start counting fatigue, wear in production, and its crisis with man but with the machine? Is this a case where one must "dance from the furnace?" Wherein the lies the value, the distinction of socialist labor?

There was one more discussion by chance with Nikolay Martynenko in the same party committee of the blast furnacne shop at the Chelyabinsk Metallurgical Plant. He does not work even though he is a long way from qualifying for his old age pension. He is a labor invalid.

"I was unluckey," Nikolay said, touching his tumors. "We were three brothers working here. Vasiliy and I were twins. Leonid was younger. Both of them have been buried. One at 37, the other at 33."

Just like in the war.

The prestige of the metal worker's occupation has declined dramatically in the Urals in recent years. All plants are understaffed. Three years ago, the number of people hired at the Chelyabinsk Metallurgical Plant was greater than the number leaving the plant. Then the figures evened out. But now every month 100 people more leave the combine than come to work at it. Even spring and fall, when lads are mustered out of the army, do not bring the combine relief.

People are no longer attracted by early retirement. Indeed, what is the joy of retiring at the age of 50? They are no longer attracted by high earnings. Today they are difficult to realize and are ephemeral. And they cannot be considered so very high—the pay is better in the countryside; bus and streetcar drivers are richer.

We go from the Chelyabinsk Metallurgical Plant blast furnace shop party committee into the shop. Up there is the "starling-house" of the third blast furnace attendant at the control panel. Pig iron is poured directly over the ladle in the flow of smoke and extremely hot gases. There is no ventilation. Its installation is postponed from one repair to the next. The next repair will be in 2 years. During this period, you will swallow your fill. Blast furnace operators come up, drink water, and chat.

"There are never enough people to man our machines. There used to be extra pay. Then a circular came out and that was an end to the extra pay. As of 1 March, all five furnaces have been converted to a collective contract. The wage fund is constant and we could once more obtain additional pay because of those who are absent. We are in a sense invited to do so: reduce the number of people and you will earn more. But after all we are wearing out too..."

The metal workers drink half a pail of water during a shift. They sweat in front of the firebreathing furnaces. How does one calculate "human depreciation?"

In 1987, 3592 workplaces were analyzed at the Asha Metallurgical Plant; 2028 were found to be hazardous to health. In 1988 the situation improved somewhat: only a third of the analyses do not conform to the norms. The director of one metallurgical giant complained: "People are not coming to the plant. In order not to halt the continuous process, we have to hire people from prisons and camps. Only in these work clothes and under a gunsight can they be driven into my shops. Forced labor where the need is for workers with the highest level of skill and culture!"

The metal worker is not a functional part of a machine. He is not a drive and not a motor that does not know wear. He is also a man. He needs normal housing (10,712 families at the Chelyabinsk Metallurgical Combine need apartments; 1389 workers find shelter in hostels). He is tired of looking at the "lunar landscape" that is denuded by harmful effluents and environs warped by diligent excavators (such as "Magniyezit," for example, managed to create around itself in Satka). He simply cannot forget that peasants once had a glorious time fishing the Zlatoust pond, that the region had the most bountiful hayfields and that the air was clean. (Every year, the Zlatoust plant takes in 45.5 million m<sup>3</sup> of water and discharges 30.7 million m<sup>3</sup> of contaminated water.

Safe and healthy working conditions in the shops. A clean habitat. Joyful, inspired labor—such is the ideal and the sense of the socialist organization of society. Where, at what moment have these reference points been lost behind the slogan "Produce metal!"? Why did man work for metal rather than metal working for man? How can the alarming alienation of the metal worker from the plant and the metal-making process that devours the entire soul be overcome?

Ukrainian SSR Chemical Industry Evaluated 18200375 Kiev POD ZNAMENEM LENINIZMA in Russian No 8, Apr 89 pp 31-33

[Interview with V.S. Moysyuk, chairman, Ukrainian Republic Committee of the Trade Union for Workers in the Chemical and Petrochemical Industry, by V. Gereylo: "At the Cutting Edge of Scientific and Technical Progress"]

[Text] Our country's attainment of the intended milestones of economic and social development depends, to a considerable extent, on the operational efficiency of our chemists—because, of course, without their products not a single sector could get by. The comprehensive program of chemicalizing the USSR's national economy for the period to the year 2000 provides for a 30-percent increase in the output of these products during the current five-year plan. Outstripping growth rates are planned to be used for increasing the production of new building materials, in particular, composite as well as non-flammable plastics, mineral fertilizers, and means for protecting plants, various additives and reagents, along with products resulting from the throughgoing refinement of petroleum.

V.S. Moysyuk, chairman, Ukrainian Republic Committee of the Trade Union for Workers in the Chemical and Petrochemical Industry, talks below about the implementation of the above-mentioned program in the UkSSR and about what is being done in this sector to more fully satisfy the population's demand for consumer goods.

[V.S. Moysyuk] Considerable potential for our sector has been created in this republic. It includes about 150 large associations and enterprises in the chemical, petrochemical, chemical-pharmaceutical, microbiological, and mineral-fertilizer industries. Add to this 40 scientific research and planning-design institutes and branches, 8 institutes of the UkSSR Academy of Sciences, 35 departments and laboratories in this republic's VUZ's. It's natural that the assortment of chemical products is also very diverse; it encompasses tens of thousands of brand descriptions. Foremost among them are mineral fertilizers, salts, acids, means for protecting plants, chemical fibers and threads, synthetic resins, and plastics.

[A. Gereylo] Where does the Ukraine rank in the Unionlevel output of chemical products?

[V.S. Moysyuk] According to last year's results, its share amounted to approximately 15 percent of the All-Union volume. This could be broken down as follows: mineral fertilizers—5.6 million tons, or 15.9 percent, sulfuric acid—4.3 million tons (14.7 percent), caustic soda—494,000 tons (15.4 percent). In addition, the UkSSR is the principal supplier in this country of motion-picture photographic materials and magnetic films, synthetic dyes, natural sulfur, pigmented titanium dioxide, and bromine products.

[V. Gereylo] Chemists were among the first to convert to full cost accounting and self-financing. Vasiliy Silvestrovich, what kinds of problems has this conversion revealed?

[V.S. Moysyuk] Analysis of the activities engaged in by these associations and enterprises during 1988 attests that the new conditions of economic management have increased the motivation of production workers to achieve the best end results of collective labor. This has had an effect, in particular, on the following two principal indicators: for this republic's chemical complex as a whole, there has been a noticeable increase in profits and an improvement in fulfilling contractual obligations.

At the same time, under the conditions of cost accounting there has been an exacerbation of such problems as the imbalance between state orders and the enterprises' material and technical resources, between the plans for capital construction and the possibilities of the contracting organizations. Whereas formerly in such cases we had been help and relieved by an adjustment of the plans or a redistribution of the fund materials, nowadays such an imbalance has a tangible effect on the worker's pocket.

A lack of correspondence has also evolved in the cooperation between our enterprises, which have converted to self-financing, and enterprises closely associated with them, most of which have remained under the old conditions of production organization. Revealed here has been an imperfection in the system of penalties which was introduced during the conversion to cost accounting—it is not operative for our closely related associates. The incentives have been one-sided in their nature.

In an analogous situation are those labor collectives where state product acceptance has been introduced; it was not adopted for the suppliers of raw materials. Take, for example, the collectives of the Svema Shostinskiy Association of the Drogobych Household Chemical Plant. In order to produce good-quality items, you also need an equally good quality of raw materials.

The centralized distribution of material resources has become one of the "braking" factors under the conditions of cost accounting. Due to this, it is sometimes difficult for enterprises to carry out their deduction and contribution of assets to the funds for production development, science and technology, and the social sphere. We need to expand the wholesale trade of producer goods and strengthen the direct ties between the producers of goods and their consumers.

We understand that the above-mentioned shortcomings will disappear when the radical economic reform has been completed. But for now they are having a negative effect on the work of the labor collectives. I would like to note that cost accounting will not work by itself if people take a wait-and-see attitude. The new conditions of economic management and perestroyka in general require, above all, the observance of labor and technological discipline by every producer. Only then will success be achieved.

An example of this can be seen in the labor collective of the Dnepropetrovsk Dneproshina Production Association. It had quite a tight plan of economic and social development for 1988. But the plan and the socialist pledges were fulfilled for all the technical-economic indicators, and product deliveries were carried out strictly in accordance with the agreements and contracts. Approximately 6 million rubles of above-plan profits were obtained, while almost 18,000 square meters of housing were introduced, as compared to a planned amount of 15,200.

In the republic as a whole there are quite a few chemists' collectives which do good work year after year. During the current five-year plan, for example, the following have been working confidently: the Northern Donetsk Azot and Stekloplastik Associations, the Sumy Khimprom, Kharkov Monokristallreaktiv, Kiev Krasnyy rezinshchik, and Zhitomir Chemical Fiber Plant.

In contrast to them, collectives of the following organizations have often lagged behind: the Dneprodzerzhinsk Azot Association, Gorlovsk Stirol Association, and the Yavorovsk Sera Association. And last year the sum total of their product shortfalls, unfortunately, did not decrease.

At the same time, there are certain examples of breakthroughs which were specifically due to the conversion to full cost accounting. I have in mind the Kaluga Khlorvinil Association, whose operational experience in attaining production profitability was approved by our republic-level committee.

[V. Gereylo] Whom among the leading workers and innovators in their work would you like to name as zealous workers for perestroyka?

[V.S. Moysyuk] The following workers fully deserve to be mentioned: Zinaida Konstantinovna Karpovich, a batcher-monitor at the Kiev Medicinal Preparation Plant; Viktor Stepanovich Zhurba, a mechanic at the Belotserkovshina Association; Yekaterina Ivanovna Krivenko, a packager at the Cherkassy Chemical Reagent Plant; Viktor Dmitriyevich Sonnykh, a mechanical-apparatus operator at the Slavyansk Khimprom Association; and Vladislav Alekseyevich Terentyev, a crane-operator at the Konstantinovsk Chemical Plant.

[V. Gereylo] As you know, the use of certain types of chemical products has facilitated the speeding up of technical progress and the increase of production efficiency in other sectors, in particular, in machine building. What can you tell us about this? And are such products being produced in sufficient quantities in our country?

[V.S. Moysyuk] What we are talking about here, above all, are such progressive materials as engineering plastics, construction composites, and new anti-corrosion coatings. Their use in the machine-building sectors allows us to reduce the metal-consumption of items, the proportional outlays of expensive, nonferrous metaals and high-alloy steels, to improve the quality of machines, and to economize on electric power and labor resources.

For example, the utilization in the national economy of 1 tons of polymer plastics replaces, on an average, as much as 10 tons of copper, 5 tons of lead, and an equal amount of steel. And in construction it reduces the weight of bearing structural components by 10-15 tons. Moreover, the technology is becoming simpler; the operational time periods and total outlays are being reduced.

A considerable advantage is also provided by the use of plastics in instrument building, electronics, and electrical engineering. In agriculture, among the factors determining the harvest, the means of chemicalization accounts for 50-60 percent of its increase.

However, our country has not yet achieved its optimal level in the development of the chemical industry. Thus, the volume of chemical products in industrial production in various countries amounts to the following: in the United States—11 percent, in the FRG-13 percent, in the GDR—14 percent, in Japan—16 percent, whereas in the USSR it is 6 percent. But the demand for these products in our country is growing by 15-20 percent annually. There is an increasing shortage of plastics, chemical fiber, medicines, and vitamins. Among the reasons for this are a constant underassimilation of capital investments, too slow renewal of fixed production capital, not enough up-to-date equipment, etc.

Recently measures have been taken to correct this situation. A large-scale modernization of production facilities will be conducted on the basis of new technologies and accelerating NTP [scientific and technical progress]. The skills of chemists are being upgraded, and it is on them that the implementation of our plans depend. Already during the next five-year plan, with an average annual growth rate in the volume of chemical output amounting to 7 percent, the increase of building materials will comprise 18 percent. The output of other materials in short supply will also be at an outstripping rate.

[V. Gereylo] Chemical production is also one of the most necessary lines for satisfying the population's demand for consumer goods. Let's just recall the example of laundry powders for washing machines. But expanding or intensifying this production leads, more often than not, to a tense ecological situation....

[V.S. Moysyuk] You'd like to ask how these contradictions are being resolved, right? Indeed, our enterprises are producing hundreds of millions of dollars worth of consumer goods and are providing the raw materials to closely related enterprises so that they can make such

goods. We cannot completely halt or even curtail such production lines, for this would be felt immediately at the store counters. However, we can and must make them ecologically pure, and reduce the amount of harmful emissions.

The trade unions have actively joined in this work. Last year, according to data from investigations carried out by our technical inspectors, a complex of measures was undertaken at dozens of enterprises. Certain production lines were even halted: for example, the one producing laminated plastic at the Kiev Polymer Materials Plant. A number of workshops were closed down at the Simferopolsk and Dnepropetrovsk household chemical plants, the Odessa Superphosphate Plant, and others.

However, in matters of ecology, chemists are often blamed for things that are other people's fault. It has been calculated that the emission of harmful substances from all the Ukraine's chemical enterprises amounts to about 9 percent of the total quantity in this republic. The remainder is accounted for by the electric-power, metallurgical, and extractive sectors, as well as by motorvehicle transport.

We must make the fine distinction of recognizing that it is not chemistry itself which is the root of the evil, but rather the violation of technology at its enterprises and the unintelligent use of its products. Yes, chemists do produce mineral fertilizers and pesticides to fill orders from agricultural officials, but they are scarcely to blame that the latter store and use these toxic chemicals thoughtlessly, with inadmissable violations of the technology involved. As M.S. Gorbachev noted at the March Plenum of the CPSU Central Committee, we must decisively elevate the cultural standards and resonsibility connected with the use of chemical items in production, storage, and particularly when putting them into the soil.

We see the solution here in broadly involving the working people in solving ecolological problems, developing democratization, glasnost, introducing ecological certificates for enterprises, and strengthening economic penalties [fines]. And, paralleling this, we must create and introduce fundamentally new, resource-conserving and waste-free technologies, more effectively renew the fixed capital; its obsolescence, by the way, in the tire, rubberengineering, rubber-footwear, and other sub-sectors has exceeded 50 percent.

[V. Gereylo] The committee staffers showed me two enormous photo-albums with descriptions of the best inventions and efficiency experts' proposals as a specific contribution made by chemists to the development of scientific and technical progress.

[V.S. Moysyuk] That's just one of the forms of activating chemists' scientific and technical creativity. We have noticed that even important inventions are being used at one or two enterprises, while the remaining ones are, so to speak, inventing their own bicycles. Therefore, we held a competition to introduce the best developments of this sector's innovators: we sent these albums around from enterprise to enterprise. At each one of them something of value was entered, and something was borrowed. In toto, 166 inventions and optimization proposals were made in the albums, which became accessible for use by many associations and enterprises. Then we organized a meeting with the winners of the competition, as well as an auction of ideas, and a fair of technical solutions.

[V. Gereylo] In recent years a course has adopted which is aimed at the social reorientation of our economy. What has this provided directly to the employees of this sector? Do they sense any real improvements in the social sphere?

[V.S. Moysyuk] Of course, they do. All work under the new economic conditions is directed at the growth of profits and contributions made to the fund for social development. And most of our labor collectives converted to these conditions at the beginning of 1987.

Since that time housing construction, for example, has been expanded by one-third. There are, in all, approximately 60,000 families on the apartment registry. Taking this sector's potential into consideration, there is the possibility of satisfying all of them during the next five-year plan. But this is not within the powers of the builders without the participation of the labor collectives. Therefore, a housing program has been worked out wherein 40 percent of the volume is allocated for construction by the economic method. We are adjusting the production of building materials, in particular, bricks and wall structural components, so as to allow each major collective (having 5,000 members or more) to annually build a 100-apartment house by the economic method. Many enterprises will take upon themselves the task of the engineering training of workers from the settlements; they have brigades which will help the individial builders.

For this republic's chemical complex as a whole during the years 1987-1988 there was an increase in the number of pre-school children's institutions, and it reached 66,300 places, Pioneer camps—about 14,000, rest-and-recreation centers—10,400, and sanatoriums—3,400 places. New medical institutions are being built. We have 9 hospitals with 3,000 beds and 21 polyclinics, which handle 10,600 patient-visits per shift. Fine health care is also provided for chemists at the Ladyzhinsk Enzima Association, wher there are 17 paid medical personnel on the staff.

The trade-union committees are also concerned with everyday services. Approximately 30 everyday-service houses are in operation, as well as comprehensive reception centers. Enterprises render paid services to their own workers, in particular, repairing their apartments, motor vehicles, and other equipment.

We have fully enough stores and workers' cafeterias within our system. The trade-union organizations constantly monitor the quality and selection of dishes. Due to auxiliary [private] farms, the cafeterias are annually supplied with about 23,000 quintals of meat. Now, after the March Plenum of the CPSU Central Committee, we will expand these farms even more.

The employees in this sector not only sense positive social changes, but they themselves are bring ing them closer. Many collectives have already passed the milestones of the 13th Five-Year Plan. This is creating an appropriate mood and engendering a desire to work better.

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### **REGIONAL DEVELOPMENT**

## **Directors Surveyed on Enterprise-Territorial Body Relations**

18200368 Novosibirsk EKONOMIKA I ORGANIZATSIYA PROMYSHLENNOGO PROIZVODSTVA in Russian No 4, Apr 89 pp 78-89

[Article prepared by L.A. Shcherbakova, EKO correspondent, from responses to the survey of enterprise directors]

[Text] EKO "marks" every year of restructuring by publishing its survey of enterprise directors. One can judge from it what is changing in economic relations, what direction it is taking, what is remaining unchanged, and which trends are dominant. They represent about 20 of the country's cities.

This time, the managers of about 100 enterprises in the most widely differing regions of the country and branches of industry "draw" a picture of the enterprise's relations with the bodies of government of the administrative district.

Given the peculiarity of the position of every enterprise in our country, we could not avoid the topic of relations in the triad consisting of "the branch—the enterprise—the administrative district." As is well-known, "regionalization" of the economy, the shifting of emphasis from the interests of the branch to the interests of the administrative district, has been proclaimed one of the directions for restructuring the economy. What is happening in actuality?

Question: How might you describe relations with the city or oblast where your enterprise is located? How do they differ from relations with the ministry? Has anything been changing in these relations over the last year or 1.5 years?

The responses were distributed as follows.

Less control by the ministry was indicated by 11 percent. "Relations with the ministry come down mainly to a matter of prompt reporting." "The ministry has reduced the number of various commands addressed to the enterprise, if only negligibly." "Administrative pressure has decreased somewhat, but it is sharper now," were remarks made on the questionnaires.

A sharp reduction in interference by the ministry was felt by 5.5 percent. "Relations with the ministry changed abruptly with elimination of the VPO. Now, I do not make a telephone call there for 2-4 months at at a time and for half a year at a time I do not make a trip on business to Moscow. Earlier, it was practically every month!"

It was noted by 17 percent that their ministry evaded the solving of problems, whatever they might be. "Now, even the ministry is advising taht construction be done by the direct labor method, and limit-allowances are not provided for building materials. A striking example: we need limit-allowances in the amount of 3 million rubles, but we are allocated 1 million." "Relations with the ministry are 'on the wane.' Under the new conditions, it does not help us, since it is mainly preoccupied with enterprises that are performing unsatisfactorily. Half a year ago, we requested allocation of a supplemental wage fund from the ministry's reserve to speed up preparation of production of three new machines-neither response nor acknowledgement.... The new mechanism for management of the country's economy must further the process of self-elimination of ministries."

In the opinion of 66.5 percent, there have been no radical changes in these relations. "Nothing has changed so far in this regard." "Enterprises performing poorly are still living at the expense of those performing well. There have to be firm and scientifically sound rates of deductions for all the enterprises in the branch."

But at the same time, "over the last year or 1.5 years the ministry has been showing more concern about housing construction and development of subsidiary operations."

We should remind EKO readers that 48 percent of the respondents in 1987 said that there had been changes in relations with the ministry, while 43 percent said that those changes had been negligible.

Now, about the relations between the enterprise and the administrative district.

A total of 6 percent noted that they are more democratic than with the ministry. "The ministry uses the command-administrative methods of dealing with the enterprise. Relations with the city are more democratic in nature, but they are not changing for the better." These relations were said to be businesslike by 16.5 percent. "The enterprise is giving the city assistance in outdoor improvements and the repair of roads and streetcar lines. Along with the construction of housing, the combine has been building stores, kindergartens, and libraries, and it has acted as patron for schools. For its part, the city helps the enterprise in filling staff positions, in supplying workers to the enterprise, it provides electric power, gas, and so on." It sounds idyllic.... But here is another opinion, one which seems to elaborate on the previous one. "The relations are businesslike. This is determined by the specific nature of our city, in which we do everything ourselves: we build housing, social, cultural, and consumer service facilities, stores, and so on. We go to the leadership bodies of the CPSU city committee and city soviet. The city does not have the capability of giving the enterprise anything more than moral support. Housing construction and development of subsidiary operations are a concern of local soviets, but they do not have the resources to help us." "Up to the present time, the ministry has been performing these exceedingly important functions for the enterprise: it is the dispersing agent for material resources: it determines the products list of the state order; it allocates centralized capital investments; it sets the rates of deductions from profit. The administrative district performs none of those functions. That is what determines the enterprise's relations with the ministry and with the city." "Under the regulation, we clear with the city and the kray the volume of work to produce consumer goods, to render services, for social and cultural service facility construction, and the environmental plan. But in actuality, we do not report to them and are not accountable to them." Well, it could hardly be clearer....

What do the entities representing the power of the soviet and the party do since they are deprived of economic levers for putting pressure on the enterprise? They intensify administrative-command methods of pressure. This was indicated by 72.5 percent of the respondents. We will quote the answers from some of the questionnaires. "At the present time, there is a stronger tendency on the part of district authorities to ask enterprises for aid in solving regional problems. The orders sent to the plant are unsystematic. At the same time, no real help from city authorities is felt in solving the problems of the plant (the supply of electric power, water, and so on)." "City authorities are only interested in the regular arrival of money in the budget, and they impose additional 'requisitions.' Up to now, city authorities have not been concerned about the problems of the enterprise."

"The ministry is in Moscow, and local authorities are right here, which is why there is no end to their demands and requests. To be fair, we should note a sharp reduction in the number of local conferences, but at the same time there has been a substantial increase in the number of instructions over the telephone." "There is no desire for partnership, and that strengthens the resistance to the commands." "The pressure is continuing; more accurately, resources are drained away with consent of the

work collective in order to solve social problems, and people are also taken away for those purposes.' 'Methods of coercive pressure are being applied." "There is no legal basis for these relations, nor are there relations based on economic instruments." "Little has changed, unless the administrative pressure has increased, enterprises are being taxed with additional levies thought up by officials of local soviets: for example, establishment of a charge of 18,450 rubles for every worker hired from outside the city. The departments of the gorispolkom 'print up' decisions which do not meet with understanding on the part of work collectives. In order to implement them, social pressure is exerted on those who do not agree, the chairman of the ispolkom of the Dnepropetrovsk City Soviet even uses the press (see the article "A City on Cost Accounting," PRAVDA, 13 November 1988). DNEPR VECHERNIY printed the draft of a decision of the soviet, but it did not get around to printing the opinion of work collectives concerning that draft, nor did it organize democratic public discussion of it. Workers' councils have to be convinced of its correctness." "The decisions of the ispolkom of the city soviet are issued without being cleared with workers' councils. That should not be the case. The rate of deductions into the local budget should be firmly fixed by legislation, and all relations with the city should be founded upon that." "Relations with the enterprise are purely those of the administrative command. Nothing is changing. There is a lot of talk about changing these relations, but no action. The soviets do not want to take power into their own hands-in the full sense of that word. I think this is because it is far simpler to issue orders than to implement decisions (after all, even the 1986 decree on the soviets has remained practically a dead letter)."

We will quote several more statements in conclusion. "The rayon soviets have no rights whatsoever. They are held responsible by them all—the raykom, the gorispolkom, the gorkom, the oblispolkom, and the obkom. How will they operate under the new conditions?" "The soviets have to be transformed from servants into leaders by giving them economic capabilities." That is on the one hand, while on the other-"The soviets do not want to take power, since that means worries, and more worries would not have a beneficial effect on the lives of the leaders and their families." "A bolder and more rapid transition needs to be made to economic methods of managing the administrative district; economic and professional knowledge has to be increased for that purpose both on the part of leaders of soviet and party entities, and also on the part of managers in the economy." "The enterprises, the branch, and the administrative district do not have a 'common denominator.' It is worst of all for the enterprise. It has ties with the branch and with the administrative district. It is dependent upon them all, to varying degrees, of course. This indefiniteness is disastrous for the cause of restructuring." "The immense number of monitoring entities (of the party, of the soviet, and of the branch) need to be abolished, leaving only one—for financial monitoring, to

monitor accounts with the budget and consumers." "There needs to be a legal basis of relations with 'third parties' based on economic levers. They must all sail in one ship, not in different little boats."

We should remind readers that 83 percent of the respondents in 1987 were not satisfied with relations with local soviet and party entities; 45 percent of them were not particularly happy about excessive diversion of people and resources to help rural areas, builders, and so on; 38 percent were dissatisfied with the rigid control.

Has anything changed? Both yes and no. Relations still have not been thoroughly worked out from the legal standpoint, and there is the dictate instead of cooperation. The interests of the branch still prevail over those of the administrative district. And negative factors related to elements of the cost accounting of the region, which so far has not been thought through as a whole, have been added. The state of indefiniteness has been intensified.

Question: Enterprises deduct certain resources which go into the state budget and to the ministry's fund. What in your view should change in the present situation?

You cannot increase transfers to the budget to 92.5 percent of the enterprise's profit and at the same time convince it that economic levers are being used in management. It is stupid to say the least to appeal to its collective in such a case to undertake reconstruction or development or to make the transition to cost accounting (khozyaystvennyy raschet). We recall how the "cost-accounting" drive began—with the Sumy Association, where profit was divided this way: 70 percent to the enterprise and 30 percent to the state budget. But that is an exception, so to speak, one which the authors of letters to EKO nevertheless pointed out.

The common thread that can be identified in analyzing the questionnaires is this: the need for economic contact with the administrative district is a known fact. This is indicated by more than 90 percent of the respondents. "The budget of a city rayon must depend not indirectly, but directly, on the results of performance of enterprises in that rayon. Tranfers to its budget must comprise 20 to 40 percent of total transfers to the budget. Amounts at the level of 5 percent solve nothing. The rate must be differentiated as a function of the level of development of social, cultural, and consumer services." "In essence. the local authorities do not care how an enterprise performs or what kind of profit it has. The charge on labor resources is too low and it does not even go into the local budget of the city or rayon where the enterprise is located." "Apart from the rates established by law, excess profits have to be divided between the enterprise and the city." "If enterprises had real independence in matters of determining funds and the products list, if wholesale trade in the means of production were highly

developed, enterprises would be able to join the authorities of the administrative district in carrying out comprehensive programs on terms advantageous to both. Crediting the charge on labor resources directly to the budgets of local soviets will substantially broaden their capabilities in development of the infrastructure." "The enterprise must pay a tax on income, not deductions from it. Mandatory deductions must also be made to the city from planned income, and only to the city from above-plan income. The charge on labor resources must be part of the tax on income." "Transfers to the fund of ministries must be abolished altogether, with the exception of resources to maintain the minimum staff.' "Resources should be deducted for the budget of the city, and those for the ministry's fund reduced." "We need to keep within the district 10 percent of the turnover tax on the output of consumer goods and 50 percent on the output of consumer goods over and above the plan. Collection of the charge on labor resources should be differentiated as a function of the amount of housing projects and facilities for social, cultural, and consumer services which are managed by the enterprise." "Deductions must go only to the state budget. There should be no charge on labor resources. Accounts with the administrative district should be conducted through profit."

Question: The impact on the environment is a "sore point" of relations between the region and the enterprise. In many cities, we observe an excess of harmful production operations which will not become ecologically clean in the foreseeable future. What is to be done in such a situation? What do you see as the way out?

This question proved to be the most delicate one for the participants in the survey. Environmental matters have receded into the background for decades. Even when they were discussed in the pages of the press or by speakers, there were no practical steps, there was no ongoing purposive effort. Our "triumphs" on the ecological "front" merely confirmed this. Managers of industrial enterprises have today ended up in a complicated position, especially since often the most serious environmental violations have not been established. Which accounts for their oversensitive attitude toward environmental topics. "People often say that the enterprise is solely at fault for environmental violations. But in the city unsanitary conditions, boiler plants, and vehicle traffic cause damage that is 100-fold greater than that of enterprises. The approach to environmental problems must be comprehensive. Neither the branch, nor the enterprise, nor city authorities can be relieved of responsibility."

The full complexity of the problem is in fact understood. "For our association, solving environmental problems requires capital investments equal to those of the 5-year period for technical development and retooling of production. There is one way out: to sacrifice technical and social development to some degree, to enlist financing through the budget for these purposes."

Many of those answering the questionnaire proposed solutions that would take decades: "Enlist all scientific personnel to develop ecologically clean technologies," "separate zones where people live from industrial zones," and so on. But what can be done right away?

Here are the most typical proposals. "Not to be concerned with contracts, but to establish a charge for emissions, gradually increasing the rates of that charge, so that the payment would consequently increase. "Within the shortest period of time, every enterprise should draft its environmental passport and have it approved by the ministry and cleared with local authorities; it would indicate harmful impact on air and water as well as measures to combat them, and specific deadlines would be set. If the steps are not taken within the stated period, the most severe measures would be taken to put pressure on the management of the enterprise.' "The maximum permissible total (combined) load on the environment must be worked out and a decision made in each particular case depending on that load." "Goskomprirody should be granted the right to close down environmentally harmful enterprises and not to allow activation of new ones (at present, it cannot do this because of pressure from party and departmental authorities)." "Apply severe economic penalties against enterprises and ministries." "The resources made available from reduction of defense expenditures should be committed entirely to solving the problems of the environment; institute attacks on all enterprises in fair equal shares to solve the problems of the environment; make the transition from safety techniques to equipment and processes that are safe." "Curtail industrial construction in cities aside from the processing enterprises of the agroindustrial sector, and do this using the available capacities of enterprises in the military-industrial complex." "The way out is to draft a clear program for every enterprise to eliminate its adverse impact on the environment. After the deadline for its performance, there would be harsh economic penalties for causing damage to the environment." Recall that this survey was sent only to enterprise directors.

One of the respondents wrote: "Resources have to be invested in the performance of environmental measures, I see no other way." It would be difficult to object.

Question: Diversion of personnel from industrial enterprises for "assistance as patron," for farm work, and so on—and cost accounting.... Is this compatible? How often are enterprise resources diverted on the insistence of party and soviet authorities? What needs to be done in your view?

We were being sly in putting this question. No cost accounting, not even the one that is in effect today, can painlessly get along with a diversion of personnel and physical resources.

Only one questionnaire (from Zaporozhye) stated the following: "Since the conversion to full cost accounting and self-financing in January 1987, the workers of the association have not as a rule been diverted to do farm work. Assistance as patron is done in the sense of manufacturing equipment, repairing agricultural equipment, making machine sheds and haymows for pay, using the customer's material."

All the others, as they say, were of one voice in their complaint about diversion. Here are the most typical answers: "The diversions for assistance as patron and for farm work are incessant. Aside from that, the rayis-polkom sends requests for resources to be credited for various purposes. For instance, in 1988 the plant sent 75,000 rubles for the city trucking enterprise to obtain an 'Ikarus' bus." Great hopes are placed on the new forms of the organization of work in agriculture: "Turn over the land to farmworkers so that they obtain wages not for their work in general, but for its results."

But, as enterprise managers understand perfectly, this is a difficult and protracted process. That is why they want to start by eliminating haphazardness and unpredictability in these relations. "We propose to rayispolkoms that they plan the need both for people and for physical resources that are necessary to solve regional problems. That would make it possible to discuss such questions in workers' councils and to seek out opportunities in advance." "We need to introduce contractual relations, then our equipment and people will be used more efficiently. But at present we give everything to agriculture without payment. It does no good there, and it means only losses to us. Although it is possible to bring about a certain order in this jumble. For 3 years, we have been concluding contracts on trucks to be allotted to bring in the harvest. Whereas previously the kolkhoz requested 17 trucks, now, under the contract, they get along with 7 or 8 trucks. The kolkhoz compensates our costs in part by organizing meals and other living conditions of the plant's workers diverted." "I feel that if assistance is given, it should be on the basis of direct contracts between economic organizations. Ultimately, everyone must be responsible for his own business. But today, we have utter dependence: give people to the builders, to agriculture, to the vegetable storage facility, to OSVOD, to the GAI, to the firemen, and so on, and so forth. This should not be in the jurisdiction of party and soviet authorities at all. The solving of economic matters must be done by economic organizations among themselves." "An experiment needs to be conducted in certain oblasts of RSFSR, UkSSR, and BSSR in which enterprises would not be touched for a year or two. Think through a system of financial and nonfinancial incentives for party and soviet personnel, kolkhoz chairmen, sovkhoz directors, construction site superintendents, and so on, which would achieve good results without parasitical diversion of manpower." "Today, the enterprise sends people to approximately seven places. Their number should be limited to two or three at the most, and these relations should be on a long-term

basis." "There is a trend under way to transfer to enterprises the most backward sovkhozes and kolkhozes along with their losses and debts. For instance, a decision of the oblispolkom transferred to our association a sovkhoz with total losses and debts amounting to 9 million rubles." "We have to get away from the order to provide assistance to agriculture and turn to direct relations." "The council of directors of associations and enterprises in Odessa issued a recommendation that a single center be created to plan and provide assistance from patrons. Assignments should be given out in accordance with the capabilities of enterprises. The results must be totaled up unfailingly." "During the year, 8-10 percent of all industrial production personnel are diverted. The losses to enterprises need to be made up."

We will not go on any further. The position of the enterprise managers is absolutely clear and has been expressed for years, in EKO as in other places: the "patronage" sphere of activity of enterprises has to be straightened out at long last and placed in the hands of the economic units. The situation that has come about radically contradicts cost-accounting relations as well as the Law on the State Enterprise, which has also been adopted, indeed during the time of restructuring.

Question: As is well-known, many enterprises are owners of a highly developed network of social, cultural, and consumer service facilities, housing, and entire residential areas and settlements. What problems arise in this connection? What way out do you see in connection with the transition to cost accounting? Is it possible today for enterprises to conclude a contract with entities representing Soviet power that would regulate their relations? If so, then what should it contain?

Our journal has raised this issue repeatedly (see, for example, the discussion in the EKO Directors Club, No 5, 1984). We have written about the problems of enterprises which frequently maintain entire city districts and even small towns and settlements. That is why we will give from the present survey only two statements on this topic: "There are very many problems on maintaining social, cultural, and consumer services. There are no spare parts, fittings, elevators, and so on, and so forth. We have to create our own self-sufficient operation....' "The association built an entire settlement. Our housing construction department oversees the condition of the housing stock, repairs it, landscapes the settlements and roads, builds playgrounds, cafes, and stores. The entities of Soviet Government do practically nothing. Our workers know that the combine is concerned about creating normal living conditions in the settlement, since the general director tours it monthly....'

Managers of similar associations put the question: And could the entities of Soviet power replace the enterprise today? And, in spite of all the difficulties, they reply: no. "If everything is turned over to the city, it will be substantially worse for our workers. After all, the city has

no resources at all. A contract is possible only provided municipal authorities are capable of keeping the city in a good condition. Today, they have no such capability."

Seeing the hopelessness of these discussions, many managers present these arguments: "We have a highly developed network of social, cultural, and consumer services and housing of our own in the oblast. And we have no need for any kind of contracts. We need them to stop interfering with us."

So, let everything stay as it is?

Most of the respondents still do not agree with that proposition. "Under the conditions of self-financing, the enterprise will be able to maintain the social, cultural, and consumer service facilities allowed it by its profit, i.e., the upper limit is very clearly marked. The only sensible way out is to transfer these facilities to municipal services. Social, cultural, and consumer service facilities must become common property." "Maintaining social, cultural, and consumer service facilities deprives enterprises of large resources from the fund for social welfare and cultural programs and housing construction. This restricts possibilities for improving housing conditions, social conditions, and living conditions for the workers. The right way would be to concentrate maintenance of all the social, cultural, and consumer service facilities in a region in the same hands, and the enterprise would have to supply resources for those purposes." "A contract needs to be concluded with the local body of Soviet power on cost accounting principles that would take into account the payment of higher rent for additional conveniences created by consumer service enterprises and by the housing management offices of local soviets." "Housing should be put on the balance sheet of the city housing administration." But then "the state needs to radically change its approach to the housing stock: real expenditures have to be made to maintain it, rather than just talking about the bureaucracy of managers in the economy.'

"In this area, it is important to define relations not so much with the entities of Soviet power as with trade union entities, which at present take a manifestly conservative position. For instance, regardless of the level of development of the social sphere deductions paid to central authorities were recently established at the same level for all—35 percent (previously our enterprise, which has a highly developed infrastructure, would pass on 20 percent of members' dues), i.e., there is leveling, which we are combating. A large number of normative acts of all kinds restricting the economic independence of subdivisions of lower-level trade union organizations are preserved, which in itself is not in the spirit of the times and is an anachronism."

And here is a fresh point of view reconciling those viewpoints already expressed: "I feel that there must be facilities that belong to enterprises, to cooperatives, to the state, and to the AUCCTU. Let them compete! Internal relations do not have to be regulated from above."

Question: What should the duties of the administrative district (city, oblast) be toward the enterprise?

In other words, what can enterprises expect from an alliance which at present is only a possibility? We will give the responses in order of importance to the managers.

The bodies representing local government must see to solution of the interrelated problems in supporting the life of the region (food, transportation, health care, organization of leisure time, and so on, i.e., what we refer to as the social infrastructure); to adhere to the Law on the State Enterprise; to act in the context of a business-like partnership; not to interfere in internal production affairs; not to exercise the right of using the telephone; to figure as the sole customer in capital construction; to develop regional ties; to concern itself with subsidiary economic operations; to monitor the production of consumer goods; to monitor the environment; and to provide labor resources to enterprises.

"The duties must arise out of the motivation of the city and oblast for enterprises and associations located in its jurisdiction to be more profitable and to perform better. To that end, the administrative district needs not merely to complain and 'put pressure' on enterprise collectives but to bring about all the conditions for successful performance and to take responsibility for the region and for the products list." "Let everyone concern himself only with his own affair. The enterprise with the production of products, the improvement of technology, the realization of maximum profit, in order to apply it to social, economic, and other measures."

All the provisions have mainly been worked out concerning improvement of the economic mechanism. They have to be implemented. The trouble is that before we have introduced the system that has been worked out, we are beginning to invent a new one. In that case, it will be difficult to achieve a constructive result."

"Experience with relations between enterprises and municipal authorities in the socialist countries and in the West is of interest. Perhaps there might be something suitable for us?!

"And something else. If you gave the same questionnaire to representatives of local authorities to fill out, then surely the responses would have been along diametrically opposite lines. In my view (and this is not my opinion alone), the situation which you are trying to analyze is extremely complicated and ambiguous. But if we want to change something in the interest of the entire society, we need major solutions which can be monitored and implemented. One such solution, it seems to me, would be redistribution of all types of resources on the scale of the entire country in such a way that industrial enterprises and local authorities can fulfill their socioeconomic tasks without the jitters, without constant harrassment and

mutual reproaches. But at the present time, the fine words written down in fine documents enter into harsh contradiction with actual practice. And that, of course, is bad."

"No one is paying attention in the regions to the problems you have raised. The criticism does not sink in. Soviet authorities and party authorities should finally come down to this sinful earth, evaluate the situation that has come about, and, most important, draw the right conclusions."

And further: "The soviets cannot interfere in production activity and issue orders to enterprises, much less make decisions that have not been cleared. To an equal degree, collectives must take a respectful attitude toward the problems of the administrative district where they are located. Fair rates of transfers to the budgets of regions must become the legal basis of those relations."

Equally respectful relations.... One of the questionnaires snapped: "We are not asking for help from the region." The bodies of Soviet power are trying to enter into a sphere of activity that is new to them. Probably at first, it needs to be proved that they are capable of concerning themselves with it. Not by pounding the table with their fist, not after the fashion of "You turn in your party card to me...," not sectoral ambitions, but mutually beneficial relations of partnership. Are they taking shape? Time will tell....

In concluding this article, reviewing this year's survey of directors, we thank all of those who replied to it and we are not saying farewell: there is a new year of restructuring ahead, and consequently we will be meeting again.

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# Interpretations of Republic Economic Accountability Debated

## **ESSR Concept Challenged**

18200377 Moscow SOVETŠKAYA ESTONIYA in Russian 25 Apr 89 p 2

[Article by V. Malkovskiy, 1st secretary to Narva Municipal Committee of the Communist Party of Estoniya and deputy of the ESSR Supreme Soviet: "For the Authors of the Concept of Cost Accounting for the ESSR"]

[Text] Our socialist Estonia and all nations and nationalities that reside on its territory took part in a discussion of the concept of cost accounting for the republic and its and the appropriate law. Our future is dependent upon a thoughtful, constructive and unemotional examination of these documents, which define the economic foundation for solving the problems which have developed in recent decades. The consolidation of the republic's in the interests of carrying out the overall tasks of economic and social development is dependent upon the realistic

nature of the concept and upon the objectivity embodied in the approach for determining the cost accounting relationships at all levels. This includes first of all the cleaning up of the environment, providing the population with housing, high quality medical services, food products, consumer goods and many other items. Finally, this document must promote the creation of a truly democratic society which will ensure new opportunities for all. It is precisely these interests that today are uniting Estonians and Russian, Belorussians and Ukrainians, the representatives of other nationalities, agricultural workers and laborers, scientists and creative figures—all Estonian workers.

Bearing in mind the importance of the concept for each resident of the republic, regardless of national affiliation, the Bureau of the Central Committee of the Communist Party of Estonia proposed quite fairly the introduction of important changes in a variant presented for preliminary examination by a deputy to the Supreme Soviet of the Estonian SSR. The Presidium of the Supreme Soviet of the Estonian SSR, by introducing these corrections, ensured the use of an interesting approach for discussing the concept in the labor collectives.

In comparing the latest variant of the concept for cost accounting in the Estonian SSR against the "Overall Principles for Restructuring Economic Management and the Social Sphere in the Union Republics, Based Upon an Expansion of Their Sovereign Rights, Self-Government and Self-Financing," it should be objectively noted that the republic concept conforms to a greater degree to the decisions handed down during the 19th All-Union Party Conference, which mentioned the ineffectiveness of efforts aimed at improving economic relationships apart from an examination of the system of social relationships. The economic, social, organizational and socio-political aspects of changes in the system for directing and administering social production are brought to light in the cost accounting concept.

A positive aspect of the concept is the fact that the development of ownership relationships is based upon equality in all forms of ownership and that this calls for a broad and flexible system of taxation, the establishment of a property tax and the introduction of upper taxation limits. At the same time, after having gained some familiarity with the republic's cost accounting concept as submitted for national discussion, a number of important questions are surfacing which require answers from the concept's authors

Beyond any doubt, the concept of the cost accounting document for Estonia will contain the needed prerequisites for improving the managerial mechanism and by its very nature it closely resembles the national economic administrative systems of a number of socialist countries, particularly Hungary. But, as is known, the development there of economic methods for administering and developing the economic freedom of subordinate

subjects has not introduced radical changes in the character of the management and administration, defined at the present time as administrative-bureaucratic in nature. Based upon this fact, the question arises as to whether or not it is advisable to repeat the Hungarian experience in Estonia?

It would seem that a constructive approach is ensured for an individual republic in determining the goals at two levels—individual and national. But it will not contain any specific recommendations for creating conditions for a more complete, all-round and effective use of the productive, scientific and intellectual potential of the republic or for solving the tasks of resource support for economic goals.

The republic concept could only profit from an analysis of population distribution by spheres of employment and depending upon the national-social and professional-skill characteristics and the standard of living of the population groups singled out. It is believed that a need also exists for evaluating the prospects for population distribution according to the forms of ownerhsip.

Moreover, the republic's cost accounting concept suffers from the absence of a description for the structure of production and consumption, for the trade balance of Estonia with other republics (petroleum, metal), presented in world market prices and by the absence of indicators for the level of the scientific-technical level of production and its effectiveness compared to other foreign countries, for example Finland. Such an approach could have a decisive effect upon the technical, structural and investment policies, on the regulation of migration processes and upon the formation of the republic's scientific-educational potential. In turn, our potential for effective equivalent foreign-political activity, for the organization of monetary circulation and for improving the population's standard of living is dependent upon solutions being found for these problems. Based upon these aspects, a determination can be made regarding the character and direction of state influence over economic development, the ratio for the forms of ownership and particularly—state and collective—on the organization of planning and administration and the role played by the functions of the ministries. And since such an analysis is lacking in the Estonian cost accounting concept, the conclusion can be drawn that it is still declarative in nature. Under these conditions, a need exists for experimental approval and for confirming its effectiveness through genuine economic experience over an extended period of time.

An important and key section of the republic's concept is the section on ownership. In the union draft general principles for restructuring economic management in the interest of strengthening the logistical base of the republics, a proposal is made to place under their direction enterprises of the agricultural complex, light industry, construction (excluding those of union importance), trade, timber and wood-working and the pulp and paper industry. At the same time, a number of branches and enterprises are being retained at the union level in the interest of strengthening a single economic complex for the country. Naturally, the question arises: what is it in this approach that does not suit the authors of the concept? Why is a relative isolation from USSR ownership needed? And to a considerably greater volume than in the union documents. Indeed, such an approach is transformed from an economic into a political one. In addition, a change in the status of ownership of the means of production of industrial enterprises is in conflict with the USSR laws governing a state enterprise (association) and cooperation.

A serious objection is being raised against still another attempt to transfer land, mineral wealth, air space, interior and territorial waters, the continental shelf, forests and other natural resources over to the exclusive ownership of the Estonian SSR. In my opinion, this will lead to a disruption in the country's unity and to violations of the effective constitutional principles of the USSR.

The adoption of such a concept can produce a situation in which the republic borders become state borders and the mechanism for joint ownership by a republic and the people inhabiting the USSR is destroyed. Under these conditions, conflicts may arise when defining the rules for the Narova River, Lake Chudskoye and mineral deposits which encompass several regions.

On the other hand, the desire by the authors to protect the natural wealth of Estonia against the union departments is understandable. Based upon this fact, would it not be advisable to substitute the wording exclusive ownership for the full right of a republic to use its land, mineral wealth and so forth. Still another variant is possible: "The land, mineral wealth and so forth are fully at the disposal of the Estonian SSR and regulation of the intensity of use of the natural resources and the establishment of appropriate norms falls within the competence of the republic." The third variant—the republic is the lessor. This approach can ensure protection against arbitrary rule by ministries and departments.

Moreover, under conditions involving a need for ensuring the country's defensive capability and achieving a high level of technological socialization for transport (pipeline and railroad), communications and power systems, it is believed that they should be made subordinate to administrative organs at a higher level than republic.

Some doubt appears during an examination of the principal goals of the concept: and will there not be a substitution of political goals for the economic ones? Why was there no mention of the inclusion or interaction of the USSR goals with the republic ones and conversely?

In noting the positive aspects of taxation, I nevertheless entertain doubts at the same time regarding the introduction of unified taxation rates independent of the operational sphere, the forms of ownership and the sources of income. Indeed, differing speeds in the circulation of means of production, capital output rates, the capital-intensiveness of production and the specifics of price formation are confronting the extractive, raw material and large-scale enterprises, especially those which produce intermediate products, with unfavorable conditions.

Is it possible that it would be more advisable to link the tax system with the conditions for forming the budget and financing the non-productive sphere? An alignment of the wage level in the non-productive sphere and the sphere of circulation and financing them mainly from the budget—all of this can create unfavorable economic reproduction conditions for industrial enterprises. Will this not produce negative social consequences?

And there is still one other aspect associated with price formation. Considering how this process differs in the USSR and the ESSR, the autonomous nature of the organization of monetary circulation and the different level of effective demand, the true emergence of differences in the price level for the union and Estonia is entirely possible and as a result—a change in the flow of marketable goods and in the situation in the commodity market. This will require a regulatory system based upon the principles of inter-state planned-customs protection of the market.

A number of questions are arising concerning the principles of enterprise. What enterprises are considered to be "national"? If enterprises are opened up on the basis of registration by institutes in local self-government, through the conclusion of an agreement involving appropriate self-government, then what exactly is self-government? And what enterprises do we have in mind opening (cooperative, private, individual labor activity, republic, municipal)? Indeed, as is known, there are various systems for opening and registering them.

The proposal for establishing at each enterprise, by agreement with the trade union (of the enterprise?), its own wage norms and rates arouses some bewilderment. How and based upon what principles will they be established? How will they compare to the wages of allied workers?

Would it not be better to limit the income of each worker at an enterprise based upon the amount of final product created and the proportion to be used for wages? This can be controlled by a trade union. Moreover, if the trade unions themselves coordinate the norms and rates, then who will they be protecting the workers against?

It is believed that the mentioned problems and proposals will aid the authors of the concept of republic cost accounting in defining more precisely certain conditions of the mentioned document and explaining their principles more clearly to the Estonian population. In the final analysis, everyone who participates in discussing this very important plan will profit. They will sense their

participation in its creation and through their own specific actions they will commence carrying it out in a thrifty manner. This should prove to be of assistance in combining efforts and in overcoming international contradictions in behalf of our future and that of our children.

# **Co-Author Defends Principles**

18200377 Tallinn SOVETSKAYA ESTONIYA in Russian 25 Apr 89 p 2

[Article by A. Kulo, head of a sector at the Institute of Economics of the ESSR Academy of Sciences, Candidate of Economic Sciences, participant in the development of the summary concept and member of an expert group: "Commentary Upon V. Malkovskiy's Letter"]

[Text] Since Comrade Malkovskiy has addressed the entire collective of authors who developed the concept of cost accounting for the Estonian SSR, the final answers to him can be furnished only by all of the authors as a group. But, as one who participated in this work, and acting in response to a request by the Editorial Board of SOVETSKAYA ESTONIYA, I would like to express certain considerations concerning the problems and questions raised and the doubts expressed.

1. Does it make sense to repeat the experience of the Hungarian People's Republic under the conditions found in the Estonian SSR?

The authors of the IME concept never assigned the task of repeating the economic experiment of Hungary. The goal was and continues to be that of achieving economic independence and its realization through a so-called model of behavior for the new socialism, the development of which involved participation by the authors.

2. The final goals of the IME derive from the two levels of social subjectivity: individual and national, but they do not contain any specific proposals. An analysis is lacking.

It should be noted that specific proposals are contained in the summary concept (for example, proposals for utilization of the republic's production, scientific, technical and intellectual potential in Section 13—"Technical Policy" and others).

Comrade Malkovskiy makes the point that the concept does not contain an analysis of the existing situation or a comparison against developed countries and neighboring Finland.

The size of the published "Summary Concept of Cost Accounting for the Estonian SSR" (concept—implies general principles) precludes the possibility of providing an entire analysis of the situation on the pages of the newspaper. But the fact that the concept contains no analysis does not necessarily mean that one was not

carried out. The development of the summary concept (principles) was preceded by a great amount of almost annual work, with the initial materials alone, that made available by a temporary scientific collective of the Institute of Economics of the ESSR Academy of Sciences, reaching a volume of 582 pages (17 sections). Moreover the analysis of the production potential of Estonia under cost accounting conditions was presented on almost 50 pages.

3. The recognition as property of the republic of the land, mineral resources, interior and territorial waters, continental shelf, forests and other natural resources is based upon Article 11 of the USSR Constitution which states that the land, its mineral resources, water areas and forests are the exclusive property of the state. Hence it follows that the land, mineral resources, water areas and forests are the property of the USSR. Up until 16 November 1988, this exact wording was found in the constitutions of all 15 union republics. Since in accordance with Article 76 of the USSR Constitution each union republic is a sovereign Soviet socialist state, it follows that the lands, mineral resources, water areas and forests are simultaneously the property of all 15 union republics. If it is assumed that the term exclusive property of the state is understood to mean the exclusive property of the entire USSR and simultaneously the exclusive property of the union republics, then these resources are simultaneously the exclusive property of the 16 sovereign states. But how is it possible for the same property to belong simultaneously to 16 exclusive property holders? But even if such was possible (for example, in the case of co-ownership), it would still be impossible for all of the co-owners to be simultaneously equal, exclusive and the only property holders. On 16 November, taking this circumstance into consideration, the Supreme Soviet of the Estonian SSR proclaimed this property to be the exclusive property of the Estonian SSR.

Secondly, nobody disputes the fact that each republic has its own territory which belongs to it. According to Article 78 of the USSR Constitution, the republic's territory cannot be changed without the consent of the republic itself. The territory of a republic consists of the land, and interior and territorial water areas lying within the borders of the union republic. Since a union republic has its own territory (land and water), then how is it possible for this land and water not to be its exclusive property? If the land and water areas of a union republic, which are its own territory, are at the same time the territory of the USSR (nobody can dispute this fact), then we consider these lands and water areas to be the property of the union republic and also the property of the USSR. The proclaiming of these resources as the exclusive property of a republic implies that a union republic does not have the right to alienate these resources (that is to sell or to give away as a gift) to any other sovereign union republic or to any other state.

No other state is authorized to own, use or handle these resources. But a union republic can of its own accord (or with its own consent) transfer certain of its rights (for example, the right of use) over to another legal subject.

With regard to other resources enumerated in Article 11 of the USSR Constitution, they are considered to be the property of the Estonian SSR, but not its exclusive property. The conclusion: the Estonian SSR can alienate, for example, transfer them over to the ownership of a state industrial enterprise or to another union republic.

4. Why is a relative isolation from USSR ownership necessary? Moreover, to a greater degree than called for in the union concept.

The basis for the sovereignty of the Estonian SSR as a national republic is its economic independence, which derives from the essence of the USSR as a union of sovereign states and which conforms to the principles of a legal state.

Economic independence. What exactly is this? It represents the opportunity available to a republic to select freely the trend to be followed for economic development and also its partners for economic relationships. In the process, a course must be followed aimed at ensuring complete economic independence for the enterprises, in the interest of avoiding discord in the development of the enterprises, caused by super-centralization of their administration both at the union and republic levels. The present approach for interpreting ownership—everything belongs to everybody—actually implies that nothing belongs to anybody, that is, an owner of the property is lacking.

Depending upon the circumstances, diverse methods are indicated for reviving a sense of thrift in the labor collectives and among the workers; independence and the right to own their own enterprise, the leasing of enterprises and so forth. Various forms for combined ownership, including the creation of joint-stock companies, are encouraged.

5. Doubt concerning the possibility of unified taxes throughout the territory of the republic, regardless of the sphere of activity or the forms of ownership.

The goal of the tax system of the Estonian SSR—to ensure monetary payments into the republic and local budgets and to influence the economic activity of enterprises and the population in the direction needed for society. The tax amounts are determined by the republic and local organs of government and this is conditioned by a flexible tax policy, since the republic's management retains the right to differentiate the tax amounts depending upon the local conditions, but the tax amounts are unified for all workers under the given conditions, regardless of the ownership forms or subordination.

6. Differences in price formation in the ESSR and USSR.In trade carried out by the Estonian SSR with other union republics on a contractual basis, changes can take place in the principles for price formation and, when forming the required prerequisites, a conversion can be carried out from the wholesale prices effective in the USSR to the prices being used in CEMA member states and on the world market.

Commodity exchange with other union republics based upon effective prices does not exclude the independence of the ESSR government in its price formation policies for the intra-republic market.

The prices for the intra-republic market are formed mainly in conformity with the ratio for socially needed production expenditures and demand and supply. An active factor for price formation must be that of competition among the producers, competition which is directed towards achieving a balance in supply and demand and preventing monopolistic practices in price formation.

For the purpose of protecting the domestic market, use can be made during the first stage of payment cards which, guarantee to local residents a better and stable supply of those goods for which there is a high demand. For example, furniture and domestic equipment that can be purchased using these cards.

7. By agreement with the trade union, the administration of each enterprise will introduce the wage norms and amounts for the workers. How?

Section 7.5 of the IME concept reads: "The measure of the payment for any work is formed not only based upon the profitability of an enterprise's economic activity, but also upon the labor contribution of each individual and those who work with him, the complicated nature of the work, the quality requirements and the ratio of demand and supply to the man-power available."

The authors of the IMI believe that all of the specific wage questions (amounts and conditions) must be resolved at the enterprise level. And here the trade unions must play a role.

8. Exactly what is a "national enterprise"?

In accordance with the initiative displayed by a labor collective, the right of ownership of its enterprise should be granted to it, particularly in view of the fact that the collective becomes the joint owner of national property (entrusted to the owner), it acquires the right to income from the work performed by the enterprise and it accepts responsibility for covering the possible damage arising as a result of the enterprise's operations.

Such enterprises which operate on the basis of a delegated right of ownership are referred to not as state but rather as national enterprises.

The conditions and system for authorizing the joint ownership of an enterprise, the legal regime and the tax amounts set forth in the state and local budget are defined in the Law Governing the Operations of National Enterprises.

Direct state control over the economic activities of such enterprises is eliminated.

The state appears as the founder of a national enterprise. An enterprise is transferred over to national ownership in accordance with an agreement which is based upon laws which regulate the work of a national enterprise. And the laws and agreement call for the prerequisites and conditions needed for transforming a state enterprise into a national enterprise. These conditions include a requirement for the production of a definite type of product, the sale of a certain portion of it within the republic and so forth.

National enterprises are subordinated to the republic's organs of state and social control, which monitor observation of the agreement for transferring the enterprise over to national ownership and also fulfillment of the enterprise's regulations and other legislative documents of the Estonian SSR.

9. When preparing the concept of cost accounting for Estonia, the authors never considered the separation of the ESSR from the USSR.

As a sovereign national republic and given the conditions imposed by cost accounting, the Estonian SSR carries out independent economic policies, while joining in the process its own national-state interests with the interests of the USSR. The development of the concept was based upon the condition that the relationships of the Estonian SSR with the government of the USSR and other union republics are regulated by equitable and mutually advantageous arrangements and agreements. Institutes and organizations of the Estonian SSR develop a partnership collaboration with corresponding institutes and organizations in other union republics.

In conclusion, I would like to emphasize that the summary cost accounting concept for Estonia and the draft law on cost accounting principles in the Estonian SSR were presented for national discussion in order to bring forth recommendations and comments which will aid in defining more precisely and improving the work already carried out.

# Principles of ESSR Regional Economic Autonomy Draft Explained

18200350 Tallinn SOVETSKAYA ESTONIYA in Russian 5 Apr 89 pp 2-4

[Article: "Consolidated Concept of Cost Accounting for the Estonian SSR"]

## [Text] Introduction

The present concept of cost accounting for the Estonian SSR is based on the assumption that without a major expansion in the sphere of commodity-money relationships and fundamental changes in the relationships between administration at the central and the republic levels it is impossible to overcome the crisis status of our economy.

As a sovereign national republic, the ESSR conducts, under the conditions of republic-level cost accounting, an independent economic policy, merging its own national-state interests with the interests of the USSR as a union state. Under republic-level cost accounting the republic's expenditures are covered by means of its own revenues, and the economic processes taking place on the territory of the ESSR are administered independently by organs of the state authority and the republic's state administration. Economic relations between the costaccounting ESSR and the central organs of the USSR, other union republics and their cost-accounting regions, as well as foreign states, are regulated on a contractual basis. All enterprises situated on the territory of the ESSR, regardless of their subordination, are obliged to observe the legislation of the ESSR.

Cost accounting for the ESSR constitutes a method of organizing economic life which proceeds from the wholeness and relative separateness of the ESSR's national economy within the national-economic complex of the USSR. The economy of a cost-accounting ESSR functions primarily on the principles of self-regulation, cost recovery, self-financing, self-administration, and self-monitoring.

The ESSR organs of state authority and state administration direct the development of this republic's economy under conditions of the ESSR's cost accounting predominantly by the methods of economic regulation (taxes, credits, contributions deducted and contributed to targeted funds, etc.), proceeding thereby from the normative acts of the ESSR without directly interfering in the economic activity of enterprises. The state organs work out programs for the strategic development of the ESSR's economy, and they set up basic systems and funds to carry them out. In order to develop economic activity, the state organs render aid to production facilities in obtaining raw materials and technology, as well as in seeking out favorable opportunities for marketing their products.

The economic relationships of a cost-accounting ESSR are based upon the following principles:

- multiplicity in the forms of property ownership, fundamental equality and state protection of all forms of property ownership;
- —freedom of entrepreneurial activity and the predominance of a market economy;

- -decentralization of territorial administration;
- —openness and partnership in relations with other regions of the USSR, as well as in foreign ties.

The socialist nature of the economic structural system of a cost-accounting ESSR is expressed in the creation of state social guarantees and the establishment of restrictions for the purpose of ensuring stability and humaneness in living standards, as well as social justice and the protection of consumers' interests.

#### 1. Goals

- 1.1. The changes brought about by cost accounting for the ESSR are directed at establishing the foundations for accelerating the economic, social, and cultural development of the ESSR. The foundation of the latter can only be a multifaceted and intensive cooperation, based on an All-Union division of labor with the other union republics and with foreign countries.
- A cost-accounting ESSR participates in the inter-republic and international division of labor on the basis of an mutually advantageous goods exchange, carried out on contractual principles between enterprises and organizations, as well as the administrative organs of the state's economy.
- 1.2. The goals of cost accounting for the ESSR have been defined by proceeding from the two levels of social subjectivism: the individual and the national. On an individual level cost accounting for the ESSR encompasses Estonia's entire population as a total of individuals, regardless of their nationality.
- 1.3. For each inhabitant of the ESSR, the implementation of cost accounting by the ESSR means the following:
- —improving the quality of lifw, creating the conditions for safeguarding and strengthening spiritual and physical health, broader possibilities for satisfying their own needs, and strengthening the feeling of confidence;
- —increasing the value of an individual personality's creative self-manifestation, expanding the freedom of choice and the possibilities for action;
- —enhancing the prestige of entrepreneurial activity and conscientious labor;
- —a more humane type of environment;
- —an economy addressing the consumer's needs.
- 1.4. On a national level cost accounting for the ESSR proceeds on the basis of the sovereignty of the ESSR as a national republic and the need to preserve the indigenous nation on its territory. Persons of other nationalities in the ESSR are guaranteed the conditions for developing and satisfying their sociocultural needs.

On the national level cost accounting for the ESSR means the following:

- —improvement of the demographic situation;
- —ensuring the capacities of the Estonian people for social and cultural restoration;
- preserving the restorational capacity of Estonia's natural environment and the optimal utilization of its natural resources;
- -increase of the national wealth and resources;
- —better utilization and steady growth of the national spiritual potential;
- —Estonia's increasing activity and independence in its relations with other regions of the Soviet Union and foreign countries.

#### 2. Property

2.1. For the ESSR property assumes the following forms: state property of the ESSR, property owned by cooperative or public organizations and public movements, and property owned by private individuals. Within the limits of specific legislation passed by the ESSR, property ownership ia also allowed for the USSR, other union republics, foreign states and their juridical persons and citizens. Various mixed forms of property ownership are permitted in the Estonian SSR.

The fixed capital of producer goods is publicly owned. Within the limits allowed by law, small-scale private property ownership is permitted.

2.2. Proporty relations in the ESSR are regulated by legislation of the ESSR.

All forms of property included within the economic system of the ESSR are under the protection of the state.

Proceeding from the equal rights of all forms of property in the ESSR, the state creates conditions for augmenting all forms of property which is owned; it does this in the interests of the entire society and of individual persons.

2.3. Property owned exclusively by the ESSR encompasses land, underground minerals, the air space above this republic's territory, inland and territorial waters, the continental shelf, forests, and other natural resources.

The right of possessing, utilizing, and disposing of the resources of the economic zone of the Baltic Sea adjoining the territory of the ESSR, within the limits recognized by international law, belongs to the ESSR.

Also belonging to the ESSR are the fixed-capital producer goods in industry, construction, and agriculture, transportation and communications, state banks, the

property of state trade, community, and other enterprises, as well as the state housing stocks, and other miscellaneous property necessary for carrying out the tasks assigned to the ESSR.

2.4. Property in the ESSR may appear in the form of municipal property. The latter refers to property possessed, used, and at the disposal of local organs of state authority.

The legal system of municipal property ownership is determined by the local organs of state authority in accordance with the laws of the ESSR.

Transferring facilities to municipal property ownership, their appropriation or redistribution to higher-ranking organs of the state authority, and administration without the consent of the local organ of state authority is prohibited.

2.5. Based on the property ownership of the ESSR, including municipal property, state enterprises possess, use, and have at their disposal property belonging to them either on the basis of the law of operative administration (state enterprises), or on the basis of delegated law of property (people's enterprises).

Delegating (conveying) the right to own property of the ESSR to peoples' enterprises is carried out in a procedure provided for by legislation of the ESSR.

- 2.6. Cooperative organizations and their associations, public organizations, and public movements possess, use, and dispose of property belonging to them by the right and in accordance with their own preregistered charters.
- 2.7. The property of private persons appears in the ESSR in the form of personal or small-scale private property.

Personal property is the basis for satisfying personal requirements. Small-scale private property comprises the basis for commodity production carried out by a private person.

The property of a private individual can be taken away or inherited.

- 2.8. In the ESSR land is given to peasants for perpetual
- 2.9. The conditions of possessing, using, and disposing of the property of state, cooperative, and public organizations, public movements, and citizens of the ESSR located in other union republics of the USSR and foreign countries are determined by the legislation of the state on whose territory the property is located, and by appropriate agreements.

The ESSR renders aid in safeguarding property.

2.10. Within the limits established by legislation of the ESSR, private property which belongs fully or partially to juridical persons or citizens of foreign countries can exist in the ESSR.

#### 3. Taxation System

3.1. The goal of the taxation system in the ESSR consists of providing the republic- and local-level budgets with monetary revenues, as well as influencing the economic activity of enterprises and people in the direction necessary to society.

Taxation is carried out on the basis of the laws of the ESSR, as adopted after their public discussion.

The tax rates are established by the republic and local organs of authority.

- 3.2. The principal taxes applied in the ESSR are as follows:
- —taxes on the population: a progressive income tax which takes the family situation into account, a land tax, a property tax, a tax on means of transport, and a tax on use of natural resources;
- —taxes on enterprises: an income tax, payments from turnover or a consumption [user] tax, a tax on profits, payments for resources (land, natural resources, manpower, producer goods), social-insurance payments, payments for polluting the environment, etc.;
- —indirect taxes: excise collections, a turnover tax, a spectator tax, and customs duties.
- 3.3. In addition to payments to the budget, payments may be required to the following non-budgetary funds: the development fund, farmstead fund, labor-employment fund, nature fund, family fund, migration fund, road fund, etc. the creation of which may prove necessary.
- 3.4. Republic-level taxes are standardized for the entire territory of the republic, local taxes—only for the territory of the corresponding local Soviet. Various Soviets may establish various local taxes.
- 3.5. Setting up a taxation system presupposes that people and enterprises will make the transition to filling out forms declaring their annual incomes, as well as offering them taxpayers' services for this purpose. The tax rates are standardized for all enterprises, regardless of the form of property, subordination, and organizational forms of the enterprise in question.

#### 4. Budgets

4.1. The budgetary system for a cost-accounting ESSR consists of a republic-level budget and independent budgets for the local organs of self-government.

- 4.2. The procedure for formulating and using the republic-level budget has been established by the ESSR Supreme Soviet, setting the following goals for itself in this regard:
- —reducing the role played by the budget in redistributing the national income;
- —reducing the role played by indirect taxes, which preserve social inequality, by means of increasing the role to be played by direct taxes;
- —refusing to grant a budgetary subsidy to enterprises.
- 4.3. Revenues of the republic and local-level budgets are provided by taxes and other revenues, as stipulated by law.
- 4.4. Republic- and local-level budgets are independent with regard to each other.

Both revenues and expenditures of the republic- and local-level budgets are determined by the appropriate Soviets independently after an open discussion of the draft budgets.

- 4.5. Local budgets concentrate their funds on financing economic, social, cultural, and other programs of local importance, as well as on financing the appropriate institutions and measures; on maintaining local organs of authority and administration, on forming reserve funds and allotting subsidies to lower-ranking budgets, to the formation of local special funds, and other outlays provided for by law.
- 4.6. In cases of necessity, local self-governments may cooperate in carrying out an integrated economic and social policy on a large territory and implement joint projects in all oblasts pertaining to their competence, for example: the construction and use of hospitals, polyclinics, health resorts and sports facilities, apartment houses and boarding houses for aged persons, general-education schools and vocational-technical schools, regional engineering networks, and roads.
- 4.7. The republic-level budget concentrates funds on financing economic, social, cultural, and other programs of republic-level importance, as well as on financing the appropriate institutions and measures, on maintaining the republic-level organs of authority and administration, on forming reserve funds for making payments to the USSR's union budget, on granting subsidies to local budgets, on forming republic-level, special funds, and other outlays provided for by law.
- 4.8. The republic's government may delegate to the local self-governments a portion of the outlays of the republic-level budget, as well as those of the republic-level and All-Union programs which are being carried out on the territory in question.

The budget at each level (as to revenues as well as expenditures) is fully exposed to glasnost at the following three stages: in the draft form, in the form as adopted, and in the form of a report as to its implementation.

# 5. Banking and Monetary Circulation

- 5.1. The banking system consists of the ESSR Central Bank (the Bank of Estonia) and commercial banks. In order to supplement them, we are setting up various types of specialized credit institutions.
- 5.2. The principal task of the Bank of Estonia is to organize monetary circulation and to regulate the wholesale trade of currency.
- 5.3. Each unit of the banking system is economically independent and is guided by the legislation as well as by the norms established by the Bank of Estonia.
- 5.4. The commercial banks also engage in buying and selling securities. The issuance of securities is organized by the Bank of Estonia. An exchange facility is being set up in order to improve the operations of buying and selling securities.
- 5.5. In case of necessity, payment cards are being introduced which will ensure a better and more stable provision of consumer goods to the population.
- 5.6. The monetary means being formed on the territory of the ESSR form the republic's credit resources. They are as follows:
- —the funds of enterprises, other juridical persons, and citizens now in bank accounts;
- -the funds of republic- and local-level budgets;
- -monetary savings of the population;
- —the funds of state (cooperative) insurance;
- -bank funds;
- —undistributed profits (internal assets).

By means of their own resources banks take part in forming the republic-level state budget, based on the principles of interest charges and reimbursability.

Resources which find no use in this republic's national economy may be, upon mutual consent and upon payment of a fee, be transferred to the USSR Gosbank [State Bank], or to the central or commercial banks of other union republics.

5.7. Under the conditions whereby of effective sphere of the principle of cost recovery by enterprises is being significantly expanded, the ESSR government must bear responsibility for the balance between income and expenditures for the population and for strenghtening monetary circulation.

The above-indicated measures are leading to a firming up of the solvency of the money in the monetary circulation of the ESSR.

#### 6. Price Formation

- 6.1. The government of the ESSR is carrying out a policy of price formation which ensures acceleration of this republic's social and economic development, facilitating goods exchange with the other union republics and foreign countries, and protecting the interests of the population.
- 6.2. With this goal in mind, we are creating the conditions whereby the following diverse kinds of prices are to be use simultaneously:
- —contractual (market) prices, which are formed on the basis of an agreement between seller and buyer in accordance with demand and supply; in order to avoid skewing or bias in establishing the prices, certain items have been designated, and, in order to change the prices on these goods, the permission of the department regulating price formation must be obtained;
- —state, firm (fixed) prices, which are set on the most important socioeconomic goods and services. The products list for these goods and services is approved by the government of the ESSR.
- 6.3. We are gradually making the transition to a situation whereby the price level will be formed in trade.
- 6.4. In order to avoid the formation of monopoly prices, use is being made of anti-monopoly legislation. An active factor in price formation must be competition among the producers, and this must be directed at balancing demand and supply in the republic's domestic market.
- 6.5. State contractual prices are used on products being bought and sold on the basis of trade agreements (covering such items as raw materials, other materials, equipment, and consumer goods) concluded with this republic's government organs.
- 6.6. When goods-exchange deals of enterprises cross the borders of our republic, the price on a specific item is formed by agreement.
- 6.7. In order to observe the changes in prices and rates on services, we have introduced a system of indicators reflecting the dynamics of prices and a change in the

price index. These indicators are regularly published. A procudure has been set up which will allow us to compensate people for a rise in prices.

#### 7. Labor and Wages

7.1. A point of departure in the policy of labor resources is the intra-republic physical and spiritual labor potential.

For work of a temporary nature, we can attract migrant manpower in accordance with the law in migrant labor from beyond the borders of our republic on the basis of agreements.

- 7.2. The potential of this republic's labor resources is being developed on the basis of social and cultural policy, taking into account the individual talents of each person as well as public needs.
- 7.3. The economic, social, and cultural policy is undergirded by a constant upgrading of skills and, in case of necessity, even a retraining of the existing manpower in order to ensure the physical and moral preparedness of the labor force for work and to reveal its creative potential.

By all means of economic regulation, enterprises are aiming to achieve a situation whereby they would be motivated to "free up" surplus manpower, to utilize technologies connected with an ever-increasing degree of mechanization and automation, as well as in greater labor productivity on the part of each employee. These means, include, in the first place, a system of taxation, republic-level investment, and an innovative policy.

- 7.4. The utilization of manpower which has been freed up as a result of reorganizing and technically improving [retooling] production is regulated by state social insurance and the system of retraining.
- 7.5. The measure of the wages paid for each job is formed, in addition to the profitability of the enterprise's economic activity, as well as by the labor contribution made by each person and the people working along with him, by the complexity of the work, by the quality requirements, and by the correlation between the demand and the supply of manpower.
- 7.6. The administration of each enterprise, upon agreement with the trade union, sets norms and wage rates for all employees, along with the work and rest schedules. The republic level sets only the minimum rates, the maximum work time, and the minimum duration of leaves.

All specific matters of wages (rates and conditions) are decided at the level of the enterprise which is using the hired labor.

In state institutions the wage procedure is established by the republic's government.

- 7.7. Based on standardized principles, a republic-level system of wages has been formed which ensures, in particular, worthy wages for employees in the fields of public education, culture, health care, physical education and sports, as well as social security, depending upon the societal importance and quality of their work.
- 7.8. Formulation of people's incomes is regulated by the state with the aid of the following means:
- —freeing up from the imposition of income taxes those individual incomes which fall below an established minimum;
- —applying a progressive income tax on the income of each individual who earns such an income;
- —applying a progressive income tax on the incomes of enterprises, depending upon the correlation between the sums which they pay out to all employees and the sums channeled into investments.
- 7.9. The republic's government conducts research on inflationary phenomena and changes in the pattern of public consumption, compiling on their basis a cost-of-living index and publishing it.

Based on changes in the cost-of-living index, adjustments are made in the sums paid out for social insurance and security, stipends, etc.

7.10. The rights of working people with regard to all matters connected with wages must be protected, in the first place, by the trade unions, as well as by other organizations founded on public principles.

## 8. General Principles of Entrepreneurial Activity

- 8.1. Organization of economic life in the ESSR is based on the normative acts in effect within the ESSR.
- 8.2. Enterprises in the ESSR may operate within the framework of those forms of property ownership permitted within the republic, engage in any sphere of activity not prohibited by law, and have various organizational forms.
- 8.3. Enterprises have the right, on a voluntary basis and drawing upon their own funds, to merge together into associations, trusts, concerns, companies, etc., so long as this does not contradict legislation of the ESSR.
- 8.4. Enterprises are inaugurated by the founders registering in the local self-government on the basis of permission being obtained in the proper procedure for engaging in activity, as well as licenses or patents, and on the conclusion of an agreement with the appropriate

self-government which indicates the needs and restrictions of the population (environmental protection, labor-resource policy). Within the limits of the permission for activity (licenses or patents) enterprises may produce and sell any items or render any services without obtaining any preliminary consent or approval so long as this does not contradict any laws now in effect in the ESSR.

The procedure for issuing permissions to engage in activity (licenses or patents) and the procedure for withdrawing them are established by the republic's government in its normative acts.

- 8.5. In order to ensure the interests of the ESSR, enterprises are influenced by the system of state taxation, norms of amortization deductions, interest rates for credit from the Bank of Estonia, subsidies, investment privileges, budgetary financing, republic-level orders, quotas on production, imports and exports, as well as by limits on manpower and the setting of standards for producing certain commodities or their sale, the granting of rights to engage in entrepreneurial activity, etc.
- 8.6. By developing commodity-monetary relations, facilitating competition between goods and goods-producers, integrating the domestic and foreign markets, and achieving a freely convertible currency, the government of the ESSR assists in forming within the republic a consumers' market which is saturated with goods and services.
- 8.7. In order to develop competition within the republic, an anti-monopoly law has been adopted. Matters of an enterprise's bankruptcy are also regulated by law.
- 8.8. One of the forms for implementing the state economic policy is providing resources for the state targeted programs, as well as investments and innovations.
- 8.9. The local organs of self-government may close down enterprises if the latter violate the requirements of the normative acts in effect within the ESSR (if they pollute the environment beyond the maximum allowable norms, fail to observe sanitary norms, sell products which are harmful to people's health, engaged in condemned activities, propagandize violence, etc.) or fail to fulfill the requirements of the treaties concluded with the local organs of self-government.
- 8.10. Statistics and accounting are being reorganized, proceeding from the needs of cost-acconting ESSR, the demands of the USSR statistics and those of international statistics. The statistical data on all spheres of society's development must be accessible to all citizens of the ESSR.

#### 9. Regional Policy

- 9.1. The regional policy of the ESSR must provide for a balanced development of this republic's entire territory, while, at the same time, creating all the conditions for implementing the prerequisites for developing the regions.
- 9.2. The regional policy is carried out by proceeding from the interests of the republic as a whole, by means of measures which are stimulating, compensatory, or restrictive in their natures. Stimulating and compensatory measures have high priority.
- 9.3. The most important regional-policy measures are as follows: creation of a privileged system for entrepreneurial activity in certain zones; creation of a privileged system of taxation for the population; channeling state investments, credits, subsidies, and grants into development of the social sphere; setting up and differentiating restrictions and norms, establishing protection and preservation systems, etc. Measures may be ad hoc, short-term, or long-term. Regional policy is also implemented in comprehensive types of programs for development.
- 9.4. The ESSR's regional policy is aimed at making the maximum use of the resource potential of various zones via structural changes; at overcoming the disproportions between the regions, caused by the economic and social policies conducted in them up to the present time, at mitigating the disproportions in the development brought about by shifts in business conditions stemming from a market economy; at providing a system for protecting and preserving certain specific zones.
- 9.5. For the years immediately ahead the high priorities are as follows:
- —ensuring the optimal correlation between large, medium, and small enterprises; territorial deconcentration of industry and the development on peripheral territories (small cities, urban-type settlements, and rural settlements) of small-scale production based on intensive technology and utilizing local resources; transforming territorially split-up production sub-divisions, at their own decision, into independent enterprises;
- —intensification of agriculture, especially in outlying areas and on lands which are unfavorable for conducting agriculture; creation of conditions which are favorable for small-scale farms (farmsteads or associations); development of small-scale livestock farms and abundant truck-gardening;
- —formation of regional, innovative centers based at VUZ's and other scientific institutions (at first, in the cities of Tallinn and Tartu), increasing the scientific and cultural potential of other administrative centers by means of deconcentrating scientific and cultural-educational institutions;

- —assisting the dvelopment of tourist and recreation types of farms in zones with appropriate potential, developing health-resort settlements and putting a halt within them of production activities which are dangerous from an environmental viewpoint.
- 9.6. From the viewpoint of a system of settling new places, the following activities are being provided for:
- —preserving the settlement of rural areas on the largest possible terrirory. With this goal in mind, government funds are being channeled, above all, into developing those outlying areas where vital activities have not yet completely ceased;
- —developing small cities, urban-type and rural settlements and villages;
- -developing regional centers along with rayon centers;
- —slowing down the mechanical kind of growth of large cities;
- comprehensive development of this republic's lessdeveloped regions;
- —stabilization of the proportion of the indigenous population over the entire territory of the republic and its increase in a number of cities and in the northeastern part of Estonia.

#### 10. Social and Cultural Policy

10.1. The social policy being conducted in the ESSR ensures the taking into account of the interests of all social groups and strata existing in the society, the elimination of social disproportions which have evolved within the republic, and it ecompasses the achievement of a scientifically founded standard of living, safeguarding of people's health, their social well-being, the growth of their spiritual and physical position, providing for them when ill, old, or disabled. Within this framework we must provide economic guarantees for the preservation and development of the indigenous nation and its general fund; we must avert social deviations, crisis and conflict situations; what we must achieve is a balance in social relations, providing the population with housing, and forming an ecologically favorable environment.

The cultural policy also encompasses science, ensuring a balanced development of national, natural, and technical sciences in a close interrelationship with world science in the people's interests.

10.2. The social and cultural policy creates the prerequisites for the successful economic development of the ESSR by means of increasing people's industriousness, activism, and initiative, upgrading labor standards, and a more effective use of the people's spiritual potential. It

is based upon the freedom of choice and activity, taking social self-regulation into account. Its goal is to create the broadest possible development for the entire population of the ESSR.

- 10.3. The activity of republic-level organizations is limited to working out state policy and the creation and financing of the targeted programs which are necessary for its implementation. Local organizations, public funds, and the population are also involved in carrying out these programs. The republic-level organizations directly organize merely the funds being allocated from the republic-level budget.
- 10.4. The organization of social and cultural life in the localities proceeds from the regional programs of developed which are worked out with the aid of the local organs of authority, social and cultural organizations, as well as local funds and public movements, based on free choice and with the participation of the population, and which may not be administered from above.
- 10.5. Financing of the social and cultural policy is carried out from the republic-level and local budgets, as well as from public funds and by means of funds from enterprises and the population.

Contributions by enterprises to developing the social and cultural sphere are made by way of tax obligations on privileged principles, or they are freed from tax obligations.

- 10.6. When distributing outlays among republic- and local levels, it is necessary to provide, by means of funds from the republic-level budget the proper base level of the appropriate social norms for conducting the social and cultural policy of cities and rayons, to which in each region funds are added, based on the local budget, the activities of the enterprises themselves, and the population.
- 10.7. The principal areas of social and cultural policy are: regulation of the ESSR's population and its social composition (including family policy, employment policy, and migration policy), safeguarding the health of the ESSR's population, and ensuring its social protection (policy in the field of health care, social security, and environmental protection, as well as housing policy); development of the spiritual and physical potential of the ESSR's potential, and guaranteeing the continuity of the culture (policy in the field of public education, science, culture, physical education, and sports). The social and cultural policy is likewise linked with the creation of an informational infrastructure which is necessary to develop the economy and culture (information policy).

### 11. Regulating Migration

- 11.1. In order to regulate the migration processes with those of the Soviet Union's other regions, use is made, in the first place, of the following economic, legal, sociopolitical, cultural principles and those relating to other spheres, and the measures based on them:
- —abandonment of the extensive development of the economy, considering one of the most important components in this regard to be the bringing of economic structures (for example, labor employment, entrepreneurial activity, forms of property ownership, etc.) in line with the needs of intensive development.
- introduction of republic-level citizenship in the ESSR and the implementation of the constitutional rights and obligations of ESSR citizens;
- —adoption of a law on migration and the establishment, in line with this, of a service whose principal function should be the personal differentiation of migration policy, including the elucidation of working skills, family ties, and the prerequisites for adaptation of the part of the arrivees;
- —setting up a territorial organ for differentiation of wages for manpower jointly with other resource obligations for all enterprises, considering this, in the first place, as a means of regional policy rather than a measure for administrative control over migration.
- 11.2. The foreign relations and dealings of ESSR citizens are being simplified, including the procedure for traveling abroad as well as the procedure for foreigners to enter the ESSR.
- 11.3. We must compile a registry of the entire population and, on this basis, periodically inform the public about all types of migration, both as to the absolute indicators, as well as providing a cross-section of the reasons and goals of migration, the nationalities taking part in it, etc.

# 12. Use of Natural Resources and Environmental Protection

- 12.1. The ESSR ensures citizens their basic, constitutional right to a healthy life environment (i.e., one which ensures a healthy and restorative capacity of the natural systems).
- 12.2. Activity aimed at this must take the following two basic requirements into consideration:
- —restoration and preservation of the regenerative capacities of the natural environment:
- —favorability of the environment (surroundings) for human beings.

- Thereby prerequisites have been created for a safe, beneficial interraction between humans and the environment, preserving the diversity and beauty of nature, as well as the historical and cultural landmarks of the ESSR, the diversity and beauty of the landscapes, and ensuring natural resources for the coming generations.
- 12.3. The ESSR Supreme Soviet has established a procedure for utilizing all the natural resources of the ESSR, including the territory (the surrounding space) as one of the principal resources, along with the procedure for organizing environmental protection on the territory of the ESSR.
- 12.4. The ESSR certifies and accepts inter-union and international agreements and recommendations of the international environmental organizations.
- 12.5. Reimbursement for damage caused by inter-republic and international pollution is specified in the established procedure.
- 12.6. The priority of territorial administration over sectorial administration has also been established in the use of natural resources and environmental protection, taking into account the features of each region, its condition and capacity to withstand the load. The allowable limit for utilizing natural resources, quotas for production and resource payments, allowable limits for pollution, and payments for pollution have had norms set for them and established on a region-by-region basis.
- 12.7. Remaining within the jurisdiction of the central organs of environmental protection for the ESSR is the working out of the overall goals and strategy for resource utilization and environmental protection, as well as providing a system for stimulating its implementation on the level of the general administration of this republic's economy, and administering the state preserve zones and facilities, along with directing and coordinating the activities of the regional, environmental-protection organs.
- 12.8. Included within the jurisdiction of the local administration is the administration of the territory, local implementation of the general strategy of natural-resource use and environmental protection, the application of local taxes for resource utilization and compensatory payments (for damage inflicted), the application of the maximum allowable norms for discharges and pollution, the establishment of restrictions in the field of using natural resources, proceeding from local, natural conditions. The local organs of self-government have the right to work out and carry out the local policy for environmental protection and to exercise the right of a "veto" with regard to decisions passed by departments; they do this by means of stopping them.
- 12.9. The use of the ESSR's natural resources and their protection, along with the conduct of the geological and other studies necessary for this, the complexity and

completeness of using the resources must be specified on the basis of a consensus between the local self-government and the republic-level government.

- 12.10. Harmonization between the interests of the population of the ESSR's population and its territorial subdivisions and the interests of the enterprises is proceeding on the basis of the economic mechanism which materially stimulates the optimal utilization of natural resources and the reduction of polluting the environment and makes the operation of a cost-accounting enterprise directly dependent upon this.
- 12.11. The success of an ecological policy is determined by the level of ecological awareness among the people and their not having a feeling of being cut off from the environment within which they live. This is achieved by means of the economic mechanism as well as through a policy in the area of public education and information policy. Regional services are being set up for quick reaction for the purpose of environmental protection.

# 13. Technical Policy

- 13.1. The goal of technical policy is to create conditions for developing the ESSR's scientific, technical, intellectual, and production potentials, as well as their optimal utilization within the framework of the All-Union and international division of labor.
- 13.2. High-technology production is the thrust of the ESSR's development of its national economy. The intensive development of the national economy's development is being implemented through a higher labor productivity, effectiveness, and profits.
- 13.3 One of the principal tasks of a technical policy is the targeted and well-coordinated change in the structure and and type of industrial production, as well as retooling it on the basis of up-to-date, high technologies.
- 13.4. High-tech, small-scale entrepreneurial activity is being developed. Science parks and engineering centers are being set up in order to coordinate and combine sscience, VUZ's, and production facilities.
- 13.5. In order to guide and direct the technical policy, an innovation fund is being created; it is being formed by means of the republic-level budget, All-Union funds, foreign capital, and other sources.
- 13.6. High-tech development is being implemented under the conditions of openness in international communications. We must create direct channels of international communication, create within the ESSR an upto-date system of conveying data, achieve for the city of Tallinn the status of an international postal center. We must open up the ESSR's airports and seaports for regular international air and sea transport.

- 13.7. As a necessary condition for technological development, we are developing the upgrading and retraining of supervisors, specialists, and skilled workers, including going abroad to do so. A republic-level, targeted fund is being set up for this purpose.
- 13.8. With the aid of targeted financing, subsidization, and tax privileges, a system is being created which will be favorable to the deconcentration of high-tech production on the territory of this republic, thereby exerting an influence on optimizing the use of manpower in solving social problems.
- 13.9. An up-to-date material-and-technical base of scientific institutions and VUZ's is being developed. Priority trends are being specified for developments in science, and this is being taken into account in the allocation of funds.
- 13.10. Requirements for product quality are being established at the level of the corresponding standards of the International Standardization Organization (ISO). The system of quality control and product certification is being improved.

#### 14. Investment Policy

- 14.1. The basic directions of investment policy in construction within the ESSR, aimed at creating a living environment which is favorable for human beings, as well as at restoring the significance of architecture as an art form, are as follows:
- —creating a human and widescale technological environment on the basis of implementing socioeconomic programs which preserve the architectural heritage and restore it for the satisfaction of the people's aesthetic needs and which also meet modern-day requirements;
- —creating fixed capital which measures up to the appropriate structural optimalization of the national economy, as well as production capacities and a sociocultural base, in the first place, to ensure a science-intensive investment and technical policy and production of consumer goods possessing a high level of consumer value;
- —creation of a good-quality guarantee for implementing an investment policy for the construction of such a materials center as would measure up to present-day requirements and so that its smooth operation may satisfy the requirements of the national economy and the population that building materials and other products of the construction industry posses a high level of consumer values.

- 14.2. The jurisdiction of the ESSR also pertains to coordinating all appropriate construction investment activity on all this republic's territory; the republic is also provided with the exclusive right to approve the appropriate normative documents and have recourse of expert appraisals.
- 14.3. In order to balance the republic's intended investments in construction with the actual possibilities of assimilating them, in cases of necessity, differentiated investment payments are set up.

#### 15. Relations with Other Union Republics

- 15.1. Relations between this republic and the other union republics are regulated in the following fields:
- —legal and political relations with organs of state authority and state administration of the USSR and the other union republics;
- economic relations (property relations, budgetary relations, relations in spheres of monetary circulation, goods exchange, communications and transport, etc.);
- -social and humanitarian relations.
- 15.2. Relations between this republic and the other union republics are regulated by agreements ensuring equal rights, mutual advantage, and motivated interest. Enterprises and organizations of the ESSR are developing a partnership type of cooperation with the corresponding enterprises and organizations of the other Union republics.

The requirements of the national economy of the ESSR for material and technical resources and consumer goods and services, as well as the relations of goods exchange with the other Union republics, are regulated in the following manner:

- —the possibilities for satisfying the remaining needs are specified by means of establishing direct horizontal ties with the other Union republics or with their enterprises;
- —in order to satisfy the remaining, still unsatisfied needs, use is made of centralized channels of USSR supply and the possibilities of foreign trade.
- 15.3. Matters of cooperation among all sectors of the national economy (communications, transportation, everyday services, etc.) and issues connected with reciprocal goods exchange are formulated by special protocols or by inter-republic treaties, such as the following:
- —communications on the territory of the ESSR, between the ESSR and other regions of the USSR are handled by the government of the ESSR independently. The republic issues its own signs of paying for postal services;

- —hauls are carried out by cost-accounting motor vehicles, railroad, and air-transport enterprises, as well as maritime-transport enterprises;
- —the activity of fishing enterprises of other republics in the inland waterways, territorial waters, and economic zone of the ESSR is permitted on the basis of an appropriate agreement (licenses to conduct trade).
- 15.4. Organization of goods exchange with the other Union republics presupposes the sovereignty of our republic in working out a strategy of goods exchange which is suitable for it. The practice of goods exchange is regulated along the following lines:
- —re-evaluating and creating a structure of importing and exporting material-and-technical means and consumer goods which would be feasible for this republic;
- —utilizing in goods exchange with the other Union republics such a price level as would ensure a mutual economic motivation;
- —rendering assistance to the system of direct agreements between the ESSR and various economic regions of the USSR;
- —marketing in relations with the USSR's market and carrying out goods-exchange relations with the USSR on the basis of special marketing strategies.
- 15.5. During the transition period the goods exchange of the USSR, in the part still handled by centralized goods distribution, is being carried out on the basis of agreements concluded between the administrative organs of the USSR, other Union republics, and the ESSR.
- 15.6. Within this republic an institute is being formed in order to study the domestic market (marketing) of the USSR and a number of independent, small-scale enterprises for the purpose of analyzing market conditions and the possibilities of marketing in regions of the USSR in accordance with the orders and interests of the ESSR's national economy; at the same time we are creating a network of ESSR economic representatives in regions of the USSR; their task will include cooperating with this republic's enterprises. Possibilities are being manifested for concluding economic agreements with other regions of the USSR, as well as with enterprises and organizations.

The administrative organs of the ESSR and the enterprises situated on this republic's territory have the right to conclude additional, bilateral agreements on goods exchanges with the administrative organs of other republics or enterprises situated on their territories. In order to develop goods exchange based on direct ties, we are creating a competitive system of wholesale trade which, with the aid of intermediary ["middleman"] organizations, will buy and sell goods in the ESSR and the USSR.

Moreover, aid is being rendered to the creation of joint and mixed enterprises, with the participation of wholesale organizations from the other Union republics as well as foreign partners.

- 15.7. We are creating a center for wholesale trade in the fixed capital assets of enterprises, equipment, materials, complete sets of items, and consumer goods. Here there will be auction-type sales of goods in short supply.
- 15.8. Increasing the ESSR's contribution to the national economy of the USSR presupposes the expansion of economic ties and new forms of cooperation:
- —creating, along with the other Union republics, joint enterprises for processing raw materials and other materials being shipped into the ESSR in order to bring the quality of their products up to the international level;
- -making investments in other Union republics;
- —leasing, managing, and administering individual enterprises, kolkhozes, sovkhozes, lands, forests, etc. on the part of this republic's enterprises and organizations;
- —creating specialized organizations which would seek out contacts with foreign firms, represent them in other Union republics, and help to create mixed enterprises;
- instructing and upgrading the skills of specialists from other Union republics.

#### 16. Foreign Economic Activity

16.1. In its foreign economic activity the ESSR proceeds in accordance with the principle of this republic's economic sovereignty.

The ESSR has its own balance of payments.

Enterprises and organizations situated on the territory of the ESSR carry out their own foreign economic ties in accordance with the legislation and other normative acts of the ESSR.

- 16.2. The government of the ESSR has the right to conclude economic agreements with other states on a governmental level, as well as with other international economic organizations (CEMA, etc.).
- 16.3. The right to make export and import deals directly is possessed by all enterprises and organizations of the ESSR. Export and import are regulated by the appropriate quotas and licenses.

- 16.4. All enterprises and organizations of the ESSR are guaranteed the right to enter into international unions, societies, and organizations, as well as the opportunity to cooperate freely with partner-firms in other countries in all juridically accepted spheres of activity.
- 16.5. Enterprises, organizations, and private persons in the ESSR have the right to possess foreign currency and to use it as they see fit. Restrictive laws apply only to regulating the expprt of currency and currency credits.
- 16.6. With regard to enterprises and organizations, use is made, as a rule, of the principle of currency cost recovery. In the interests of the republic as a socioeconomic whole, use is made of the mandatory selling of currency by enterprises and the buying of currency in the money market. The currency received is utilized to solve the republic's problems as a socioeconomic whole [entity], including the use of it for developing the social sphere.
- 16.7. Currency calculations are made under fixed and agreed-up conditions.
- 16.8. In order to accelerate the ESSR's foreign economic potential as much as possible, we are establishing a favored system. Special assistance is being rendered to the import of highly efficient technology and the corresponding scientific and technical information, investments of foreign capital in the economy of the ESSR, organization of instruction of foreign-economy specialists and managers, as well as the development of foreign tourism.

#### 17. Planning

- 17.1. Under the conditions of cost accounting in the ESSR, the planning functions are being changed substantially, and the sphere of applying centralized planning is being narrowed down. Instead of the system of directive-order-type of relations practiced up to now, agreement-type (partnership-type) relations are becoming prevalent between economic subjects. Centralized, directive-type planning activity has come to a halt for enterprises which have attained the status of people's enterprises. With regard to enterprises remaining in the status of state enterprises, there is also an operative tendency to slacken off on directive-type planning; but solving problems of the contents and form of planning their activity remains a function of the state.
- 17.2. The principal tasks of state planning remain as follows:
- —forming a republic-wide, prospective economic policy, working out components of the economic policy which affect the key goals and tasks for the corresponding time period (growth rates of the economy, basic proportions, basic structural shifts, foundations for ensuring economic balance, etc.);

—defining a system of means for achieving the assigned goals. The system of means consists of the so-called direct state decisions (for example, earmarking funds for implementing state programs of development, concerning state reserves, international agreements regarding economic cooperation, etc.) and decisions regarding the indirect levers of economic regulation during the plan period (concerning taxation, granting credit, amortization, and prices). The latter are the principal channels for influencing state planning under the conditions of cost accounting in the ESSR.

A session of the ESSR Supreme Soviet makes the principal decison concerning the national economic plan and approves the basic directions of socioeconomic development and the people's standard of living for the five-year plan period; it also determines the funds to be allocated from the republic-level budget for implementing these tasks. The state five-year plan of the ESSR with regard to enterprises is not of the directive type.

- 17.3. One of the means of state economic policy is working out and implenting a limited number of state, targeted programs. Programs may be financed by the state, the state may provide for the activity of enterprises along lines outlined by the programs via indirect economic regulation (for example, tax privileges), or, in case of necessity, play the role of a general coordinator and organizer. Programs are implemented on the basis of agreements concluded.
- 17.4. People's enterprises and local organs of self-government work out plans only in their own interests. They are not responsible to anyone for either fulfilling or not fulfilling their own plans.

These people's enterprises themselves determine, taking into account their needs and their own unique features, the feasibility and scope of planning, the beginning of the planning period, the organizational planning procedure, methods, etc.

- 17.5. Acceptance of state and local orders by the people's enterprises takes place on a voluntary basis, and they are implemented via an agreement.
- 17.6. The issuance by the planning organs to the people's enterprises of various types of plan assignments, obligatory state orders, etc. is possible only by legislative means, in case of a special situation (for example, during natural disasters).
- 17.7. An exchange of information between the central planning organs and people's enterprises which occurs during the drawing up of the national economic plan may not be construed as an obligation of the draft plan as presented to the central organs.

17.8. Planning and financing the construction of housing and sociocultural facilities are carried out directly by the local organs of self-government. Depending on the situation, subsidies or credits may be provided by the republic's government.

Construction of facilities of republic-level importance (scientific institutions, VUZ's, cultural centers, specialized health-treatment institutions, etc.) is financed by the republic's government.

17.9. With regard to those enterprises and organizations which retain Union jurisdiction, their programs of development relating to construction, infrastructure, natural resource utilization, and manpower are coordinated with the government organs of the ESSR and the local self-governments, taking into account, moreover, the viewpoint of the organs of self-government, and proceeding from the interests of the comprehensive development of the entire economy and social sphere of the ESSR.

#### 18. System of Territorial Administration

- 18.1. The ESSR's system of administration embodies the principles of the legal state at all levels, ensuring the development of each region, above all, in the interests and upon the initiative of the local population.
- 18.2. The former, primarily centralized, system of administration "from the top downward" is being replaced by self-government. The system of territorial administration of the ESSR is being formed at the primary level by district [uyezd] cities, settlements, and counties [volosts]; this level will be formed on the basis of cities under rayon jurisdiction, settlements, and village soviets. The secondary level will consist of republic-level cities and districts [uyezds] (the present-day rayons).
- 18.3. The functions of the local, state self-government at the primary level include the following: administration of the territory involved in the interests of its population within the framework of the republic-level legislation, providing for the essential, everyday needs of the local inhabitants and a full-valued living environment, as well as protecting the civil rights of the population and ensuring public order.
- 18.4. The functions of the local self-government at the secondary level include the following: implementing republic-level legislation and monitoring its implentation on our own territory, administering facilities of the social infrastructure at the republic level and ensuring their functioning, performing the functions delegated to it by the local Soviets at the primary level, and representing the interests of the local Soviets at the primary level within the republic.

- 18.5. The decisions adopted within the jurisdiction of a local Soviet are mandated to be carried out by the enterprises, institutions, organizations, officials, and citizens operating in the corresponding territory. The beginning of an economic activity and the use of resources takes place on an administrative territory based on an agreement between or consent of the appropriate local Soviet and the entrepreneur in a procedure established by law. Within the limits of their jurisdiction, the local Soviets have the right to stop the execution of decisions made by higher-ranking administrative organs and departments on their territory in case they violate the jurisdiction of the local Soviets. Disputed questions are resolved in the procedure provided for by the law.
- 18.6. The numerical composition of the local Soviets, as well as the structure and numerical composition of their organs is established by the appropriate Soviet within the framework of the republic-level legislation.
- 18.7. The local Soviets organize the social and economic life on their own administrative territories, proceeding upon the principles of cost accounting.

The local Soviet has an independent budget, one which is not included within the budget of the higher-ranking organ. The procedure for forming and utilizing the local budget is regulated by the republic-level, budgetary-tax laws.

- 18.8. Local Soviets have the right to establish, within the framework of the overall, republic-level tax policy, local taxes and their amounts, to use loans and other supplementary sources of revenues (local lotteries, contributions from the population, institutions, etc.).
- 18.9. Territorial planning is carried out upon the intiative of the local Soviets, and it is characterized by providing for a comprehensive, socioeconomic development of the territory in question.
- 18.10. The transition from the existing system of administrative-territorial control to the system of self-government is being carried out during the course of the administrative reform, based on the legislative acts of the corresponding transitional phase.
- 18.11. The socioeconomic and juridical functions of the local state self-governments of the first stage are performed in the transitional phase by the self-government organs of the second stage by conveying them to the primary level in proportion to the growth in the latter's administrative potential. The budgets of the local state

self-goverments of the first phase and their use remain until their formation within the jurisdiction under the self-governing organs of the second phase. The change in the amounts and limits of the administrative units is implemented upon the initiative of the appropriate local Soviet and is approved by the ESSR Supreme Soviet.

## 19. The Republic's Government

- 19.1. The Council of Ministers (government) of the ESSR consists of the Chairman of the Council of Ministers of the ESSR, his deputies, and the ministers. The numerical composition of the government of the ESSR is determined by the Supreme Soviet of the ESSR.
- 19.2. The Council of Ministers (government) of the ESSR is the highest organ of state administration and is subordinate to the ESSR Supreme Soviet.
- 19.3. The government of the ESSR has the right to decide all matters of state administration falling within the jurisdiction of the ESSR, matters in accordance with the Constitution of the ESSR and its jurisdiction.
- 19.4. The government of the ESSR develops cooperation with the Council of Ministers of the USSR and the councils of ministers of the Union republics.

In order to ensure continuous ties and communications between the government of the ESSR and the Council of Ministers of the USSR, as well as with the councils of ministers of the Union republics, representatives of the ESSR government may function in Moscow, as well as in the capitals of the Union republics.

19.5. The ministries of the ESSR are the central organs of the ESSR's state administration. The ESSR ministries are directed by ministers. More than one minister may head up a given ministry. During the course of the transition to cost accounting the present-day state committees are being reorganized either into ministries or into state services; they are being merged or liquidated. In the transition phase the number of ministries and departments is being reduced.

Enterprises and organizations are not directly subordinated to the ESSR ministries, nor do they engage in operative administration of the economic organizations.

The ministries implement the government policy based on the laws of the ESSR, as well as other decisions of the ESSR Supreme Soviet, the decrees and dispositions of the ESSR government and acts published within the bounds of its own jurisdiction; they also monitor their performance.

# REGIONAL DEVELOPMENT

# Proceeding of Congress of Latvian Agricultural Union

18240151 Riga SOVETSKAYA LATVIYA in Russian 18 Apr 89 pp 1-3

[Article: "In the Name of Reviving the Latvian Village: Constituent Congress of the Agricultural Union"]

[Text] Spring itself, the peasant's labor, his hopes for a good harvest were all combined in the green, three-leaf clover which became the emblem of the Agricultural Union's Constituent Congress. It took place in Riga this past Saturday. From early in the morning of that day in the building of the Sports Riding School, the delegates were greeted by the sounds of an orchestra and folk melodies. Beginning their work in a festive atmosphere were almost 3,000 delegates representing more than 146,000 members of the new union. Those who were in the Riding School on that day certainly did their duty by the organizers of the congress; they were able to work in a basically peasant way and even to adorn their labor.

The idea of founding an Agricultural Union very soon found numerous advocates in this republic. Not only the rural laborers themselves but also the entire society today recognizes the seriousness of the situation which has evolved in agriculture. Latvia, which just in the recent past used to supply the highest grade of bacon and butter to the world market, now lacks the capacity to provide sufficient food for its own population. Over the last 10 years lands suitable for agriculture have been reduced by a million hectares. Industrial development has been driven on at an excessively forced pace. As a result, whereas the volume of industrial output has increased by a factor of 57, that of agriculture has risen merely by a factor of 1.4.... Moreover, as A. Kauls, chairman of the Adazhi Agrofirm, said in opening the congress, the situation has been discussed up and down, back and forth, many times and publicly; now it is time to place the accent marks and outline ways to solve the problems.

As the specialists have totaled it up, the structure of agriculture has been reorganized 28 times, and each time the slogan proclaiming the peasant as master on the land has resounded louder and louder. Now things are moving again, but the most correct words will remain just words unless production relations are changed.

The union envisions development of production and improvement in providing food on the basis of economic methods. Within an intelligently organized system, the creation of which is also included among the union's tasks, rural laborers themselves will earn the funds for their production and social needs. They will obtain them by means of an equivalent exchange of goods, while the regulation of funds and resources will proceed by means of cooperation and self-regulation. Within such a system

special administrative guarantees of agriculture's priority would become unnecessary, but because of the prolonged policy of discriminating against the rural areas, so many mistakes were made that their correction by these methods alone would take too much time. Therefore, simultaneously, as the speakers at the congress stated, we must put into operation a mechanism for redistributing the resources, a mechanism appropriate for the present-day transition period.

In other words, to pay back the debts owed to the rural areas. Those representatives of agricultural science who spoke at the congress argued for the justice of this with the aid of facts and figures. If in the cities housing construction is conducted 50 percent at the expense of the state budget, in the villages the farms themselves pay for practically everything. The situation is the same with regard to the construction of roads, social and cultural facilities, schools and hospitals.

Problems connected with prices were also brought up at the congress. It is necessary, the speakers emphasized, to balance prices on industrial items and agricultural products, bringing them into line with their real and consumer values.

While granting the justice of what had been stated by the scientists and the demands of the peasants, I. Brazhis, general director of the VEF [Valsts Electrical Equipment Factory] Production Association, emphasized that those who work in agriculture and those who are employed in industry have common tasks: both groups must develop intensive-type production and strive to attain complete economic independence, and to achieve ecologically clean production. Moreover, they need to work jointly, finding points of contact, and together solve long-overdue problems. Industrial workers anticipate from the newly founded union specific proposals concerning joint work. They are stretching out to the village the hand of reliable aid: the roots which feed the people need support.

The time period of uniform monotony seems to be receding into the past. This also pertains to the forms of managing a farm—the more diverse in form they are, the better—each one can demonstrate his own shortcomings as well as merits. Life itself will determine where each path of development is more preferable. Nowadays many persons are speaking out in favor of peasant farms. At the congress this new arrangement was presented by 30 delegates. During a break they met together.

"We frequently hear about the equality of our farms with kolkhozes and sovkhozes, but we do not sense this," said A. Zirddzinsh from the settlement of Gatarta, Tsesisskiy Rayon. "On the contrary, a kolkhoz, no matter how backward it may be, is reliably protected. And now there is even talk to the effect that their debts will be written off, whereas we, up to now at least, can rely only on

ourselves. We need active support from the union. As soon as the congress is completed, we intend to submit our proposals regarding this matters."

It is difficult not to agree with the fact that, in the present-day situation, the new master all-too-often remains one-on-one with the bureaucrat. The law should be placed between them so that a situation like the following—which is often the case—may not occur: at first, a bank grants credit for the development of a farm and sets a deadline by which the money must be returned; but just a short time later it sends out a notice stating that the loan must be paid back prior to a different deadline.

Among the congress's numerous guests was a farmers' delegation from Sweden.

"We understand and are in close sympathy with the aspiration of the Latvian peasant to be a free master on his native land," said Bo Dotskered, president of the Farmers' Federation. "The experience of many countries, including our own, convinces us that only a state where agriculture is well-developed is strong. The position of peasants is problematical throughout the world. We have in our country an organization similar to yours, but it has been in existence for a long time now: a month ago we marked its 60th anniversary. I've heard here that in Latvia for every 13 persons producing an agricultural product, there is only one engaged in grading, processing, and delivering it to the customer. In developed countries this indicator is as follows: that which one person produces takes five to deliver to the store shelf. I can imagine what losses the peasants bear because of this discrepancy. This could be ruinous for the farmers' movement. I cannot make any specific promises, but I do not see any difficulties or obstacles for cooperation."

A very alarming statistic was cited at the congress by V.Zeile, a docent at the LGU [Leningrad State University]. The incidence of children's injuries has increased in the rural areas; many small children die as the result of accidents. And, as a rule, this is because the children are staying home alone without supervsion. To a large extent, the rural woman has been torn away from her family. A situation is evolving whereby the farm, where she works from morning until evening, has become more dear than her child. There are some 5,000 invalid children in the rural areas. Many of them have birth defects. The high infant-mortality rate, as evaluated by specialists, has reached its own social limit. V. Zeyle linked the cited figures with the unfavorable ecological situation. Nevertheless, medical men and demographers have no ecological research studies or special maps at their disposal. Reference is made to the lack of a social command. It is specifically the union which must become the customer for such research studies. The latter would encompass all parameters reliably reflecting the status in society of the following truly human values: people's health, the family's well-being, conditions of everyday life and work.

The statements by practically everyone who spoke from the congress's rostrum—whether it was a scientists or a production worker, a party staff member or a livestock breeder-sounded the following thought in common: a person, regardless of where he lives—in a city or a rural area—needs spirituality, culture, concern for himself, his children and grandchildren. A discriminatory attitude toward agricultural production and toward the rural area as a whole led to a situation whereby the village inhabitant came to sense himself as literally a second-class person. All the more so in that everything which surrounded him constantly confirmed him in this belief: a lack of roads, an absence of normally well-laid-out housing, schools, kindergartens, and hospitals. Nevertheless, this rural person was able to preserve in his own environs the moral values handed down from generation to generation. Hence his unique, peasant-type industriousness, his trepidatious attitude toward the land of his forebears, where even, as the folksong has it, "the paternal mud is silvery." Resonant, as if silvered by the voices, the Latvian folksong was borne through the hall. Such songs were sung by folkloric and ethnographic ensembles which had come from all areas of the republic. And, as at a traditional spring fete, the melodies were passed from one group to another, and then the voices of singers from Vidzeme and Kurzeme, Zemgal and Latgalia were blended together. We must not lose the people's spiritual and cultural potential; we must carefully preserve it and enhance the prestige of the farmer's work, bearing in mind his historical roots in Latvia and the importance for the entire society of renewing the folk traditions in the rural areas-these are the common human tasks which the new union assigned to itself, having written them in as the most important things in its own program.

Despite the great amount of work which preceded the congress with regard to preparing the basic, regulating activity of organizing the documents, and discussing them widely in the collectives, debates developed at the congress a propos of the union's status. Some persons proposed to define the organization as a publicly political one, arguing that only as such would the union be able to influence agrarian policy, function in the interests of the peasants at the governmental level, and having its own section in the republic's Supreme Soviet. Other speakers were for the union being a public organization. It was specifically in favor of such a status that the congress voted.

The congress elected leadership organs for the union. A. Kauls became chairman of the board.

The following persons took part in the work of the congress: Comrades A. Bril, A. Gorbunov, who spoke at the congress, I. Kezbers, V. Sobolev, as well as V. Rymashevskiy, first deputy chairman of the Latvian SSR Council of Ministers, and chairman of this republic's Gosagroprom.

Private Agricultural Efforts in Stavropol Kray 18240162 Moscow SOVETSKAYA ROSSIYA in Russian 29 Apr 89 Second Edition p 3

[Article by V. Mikhaylov under the "Food Program: Solutions" rubric: "Equal Rights for Hectares and Meters"]

[Text] Until quite recently this would have seemed strange, to say the least. Outdoors it was spring—the time to sow; the proper place for an agro-industrialist is supposed to be in the expanses of kolkhozes and sovkhozes, but rather he was being led from one farmstead to another and being shown barnyards where there are only two or three head of cattle....

In Stavropol the participants in the third zonal conference-seminar devoted to the development of private peasant farms and industrial cooperatives in the rural areas were visiting even truck-gardening associations and acquainting them not with vegetable-growers who count their products in the hundreds of tons, but rather with Dina Ivanovna, who picks 35 kilograms of tomatoes from each square meter.

Nowadays, moreover, everyone is already prepared for such a turn of events. The principal task of all three conference-seminars has consisted of enhancing the prestige of individual-type peasant labor, the rural master, the working, self-supporting, rural family. The goal being pursued is, of course, primarily a practical one—considerable supplements to our food resources are expected from private farmsteads. At the same time, there is an albeit belated but definite recognition of the significant role which it has played and continues to play in supplying the country with food products.

Less than 6 million hectares of arable land are given over to private usage in the Soviet Union. That is a limited amount, but these hectares contribute one-fourth of the total agricultural produce. They provide this much, even though nobody supervises or guides the masters of such land, they have neither equipment, nor agronomists, not livestock experts, and until comparatively recently it was complicated to buy something like a hoe in the stores. In many villages their production was set up on a primitive, cottage-type basis. After half a century of all sorts of harassments, peasant farming still survived, although it was reduced to minimal dimensions. It could not be eradicated, this power and force of the land. It is likely in our genes if even city people, who have lost all memory of rural life, still dream, as before, about having their own little garden or orchard.....

And so, nowadays, when private, individual farming is being restored in all its rights, we have something to be guided by; there is experience which can be taken as a model. Moreover, it is a multifaceted experience: in various regions the same problems have been solved and are being solved in various ways. Say, for example, in Omsk Oblast the development of the individual sector

was being facilitated with particular activism by the consumer cooperative: even today most of the milk and meat is being purchased from the population by the cooperative organization. Nor have the Stavropol cooperative members avoided their oblications. But their must merit still lies in the fact that the step-type farmstead has achieved new development: it belongs directly to kolkhozes and sovkhozes. What is evolving here is a unique form of integrating the public and the private.

At exactly the same time as the Stavropol seminar was taking place, potatoes were being planted in the region, and along the way we constantly encountered fields which were laid out like some sort of tables. That's the way it was on the Kevsalinskiy Pedigreed Stock Sovkhoz: it turns out that the practice has been adopted there of allotting each family 200 hectares of irrigated lands to be planted in potatoes and vegatables. Is this suitable? They have become convinced in this area that this also benefits public production: it is necessary to enable the peasants to fully provide themselves with all the necessities; then they will be able to work better. On various farms various people told us one and the same thing:

"We have an integrated plan for the individual and public sectors of production."

Everyone we met confirmed this.

"Yes, we are helped a great deal by animal feeds," I was told, in particular, by Nikolay Petrovich Filipenko, a driver from the Kevsalinskiy Pedigreed Stock Sovkhoz. He keeps 10 pigs, an equal number of sheep, and two head of cattle. Last year he sold about 1.5 tons of meat, and he received 2,600 rubles of income from his private farm....

In the Ipatovskiy Rayon it is that way or almost that way everywhere. The local farms allocate 19,000 hectares of pastureland and haylots especially for privately owned cattle—this averages out to two hectares per head of cattle. Hay is given out by the ton for each cow and each bullock or calf, straw by grain consumed at the rate of 400-500 grams for a liter of milk sold, and by kilogram—for kilograms of meat. As a result, this rayon witnesses annual purchases from the population of 2,500 tons of meat and 800 liters of milk per person. Other production sectors, previous half-forgotten and neglected, are gradually gathering force. Societies of rabbit-breeders and amateur beekeepers are emerging and functioning. There are already rural Soviets, for example, the Limanskiy Soviet, where almost every family has a farmstead.

The approach to the individual sector as an independent and equal branch of agricultural production required certain changes to be made in the administrative structure also: many kolkhozes and sovkhozes in the Stavropol area have instituted the positions of deputy chairmen or directors for private, auxiliary farms. It is a purely administrative decision, in the spirit of former times, but it is very likely that it will have the main effect

even now that under the deputy administrators for the farmsteads cost-acconting units and services will be created everywhere; and they will assume a considerable portion of the concerns over the farmstead sections and mini-farms. Such units and services undoubtedly have a great future and a long life ahead of them.

The Vodorazdelnyy Sovkhoz, for example, has established a special cost-accounting subdivision which has taken upon itself the task of procuring animal feed for 1100 private farmsteads, as well as their veterinary service and marketing their produce. The advantages from this is general and shared: the kolkhoz makes an additional profit, while the owners of peasant farmstead are saved a great deal of troubles.

The merging of individual and public production, which until quite recently would seem to contradict each other, has proceeded still further in the Apanasenskiy Rayon; its experience was related to the seminar participants by I.S. Boldyrev, the first secretary of the Stavropolskiy CPSU Obkom:

"Here and in other Eastern rayons there has long been the problem of maintaining privately owned sheep in the publicly owned herds. Moreover, it was clear to everybody that the shepherds were keeping the best sheep for themselves, not actually paying for animal feeds, playing tricks with the head count, and especially the new lambs. The number of criminal cases was stepped up, the shepherds were changed, but the situation still remained unfavorable for the farms. But now they have decided not to separate the public and the private but rather to divide up the income received proportionally to the number of head in the herd. If, for example, the herd contains 800 kolkhoz sheep and 200 private ones, then the income is divided on a 4:1 basis. The importance of such an approach can be understood, when we say that we have 900,000 privately owned sheep....'

It is an unusual, non-standard solution, and one which flies in the face of many former dogmas, but, you will agree, it is a wise one. The field for tricks is reduced as much as possible, and to divide the sheep between private and kolkhoz ownership becomes senseless.

In Stavropol, as well as in Omsk and Brest, the seminar participants visited many farmsteads, and everywhere, just as before, they were struck by the following: except for pitchforks, hoes, and shovels, nobody has any kind of equipment. At outdoor sessions quite a bit has already been mentioned in Omsk about plans for plans for producing small-scale equipment, but these plans did not satisfy anyone. It was gratifying to note, therefore, that by the time the leaders of our industry arrived in Stavropol, subtsantial and good corrections had been made in these plans. In particular, business contacts has been established between the defense ministries and the agro-industrial enterprises; their representatives agreed upon combining their efforts and on joint projects.

Those who have gone on ahead, as is always the case, have had to deal with previously unknown concerns. In Stavropol earlier than many persons they have recognized that peasant farmsteads need their own minimustries, keyed to satisfying the needs of the local population and their private farmsteads. The seminar participants were treated to some remarkably tasty bread in a bakery belonging to the Zarya Bakery: there are 10 persons working there, and every day they bake more than 200 kilograms of bread, plus filling various types of orders for 100 or even 1,000 rubles. Some people order pies, some order cakes, while others want fancy pastries. This sovkhoz also posesses its own mill; it is now being leased by seven millers headed by Fedor Fedorovich Shtreykh.

"We also have a butter churn, and this year we are putting a sheller into operation," reports N. Mastepanenko, chairman of the Zarya Kolkhoz, Grachevskiy Rayon.

This is not an isolated, individual breakthrough whose output is simply earmarked for the village. Such enterprises are being revived everywhere, and they also need up-to-date equipment—diverse and improved. Albeit in general features, the conference-seminar did precisely formulate this social command, and it looks as though large-scale industry has accepted it with understanding.

In conclusion, let me made one more observation which, in my opinion, is quite important. Literally all or almost all the family farmsteads with which the participants in the conference-seminars in Omsk and Stavropol became acquainted belonged to the workers of sovkhozes or to kolkhoz members; their commercial feasibility is, of course, not great and cannot be very great. The people who run them, more often than not, can only devote their free, extra-service time to them. Moreover, the March (1989) Plenum of the CPSU Central Committee recognized the right of a peasant farm to exist independently. It can even lease land from a kolkhoz or sovkhoz independently of Soviet authority. We will not dispute the following: the future undoubtedly lies a restructured leasing and cooperative production; nevertheless, there are many areas, indeed practically everywhere, where the farmstead or peasant-type holding is simply more efficient than any other. But then why are there none of them or very few of them?. They should set up some and show them if only as a model. I heard one of the seminar directors suddenly make the following observations:

"We would like to see private, family-type farms. With their own raw-material plants. And their own tractors and all kinds of mechanization. And the farmhouse should be of good quality with a bath-house and a garden...."

An ukase has already been issued in accordance with which the future master of such a farmstead could obtain credit amounting to 50,000 rubles, but he has to look for such a farmstead with a lamp during the daytime.

Instead of building them, many oblasts are simply hearing discussions about the multiplicity of forms of property ownership and their mandatory equality....

With a growing lack of confidence those who had assembled at the plenary session listened to A.N] Orlov, the chairman of the Volgograd Oblispolkom. With bright, eloquent daubs he drew a radiant picture of the flourishing and uninterrupted growth of private, auxiliary farms; it was not even to be believed that just recently in this oblast people had shattered the peasant hothouses by increasing their dimensions to 20 square meters. They did not pass in the presidium:

"According to principle, it should be so. You would do better to explain why at your place there has been such a sharp reduction in buying meat at privately owned farmsteads...."

It was most astounding that the speaker did not wish to hear the most unpleasant question, and went right on with his song of victory: everything was supposedly fine; everything was moving only forward and upward. One thing he did acknowledge, but only in the most general, circumvented form: the oblast supposedly has considerable reserves. But who does not have them?

As you can see, small-scale farmsteads have engendered serious, big problems; they must be taken seriously and basically; the peasant's house and barnyard constitute the foundation on which everything else must be built.

# LIVESTOCK AND FEED PROCUREMENT

Speakers Address Agriculture's Requirements, Potential

# Baklanov On Need To Adapt Industry To New Agricultural Requirements

18200330 Minsk SOVETSKAYA BELORUSSIYA in Russian 8 Apr 89 pp 1-2

[Apparent text of a 6 April speech by CPSU CC Secretary O.D. Baklanov at zonal seminar in Brest: "Success Through Enterprise, Initiative, Economic Sharpness"]

[Text] As already reported, the final plenary session for participants in the zonal seminar-conference on the problems concerned with expanding cooperation between industrial and agricultural enterprises, the development of family farms, collective horticulture and gardening, in light of the decisions handed down during the March (1989) Plenum of the CPSU Central Committee, was held in Brest on 6 April. On the eve of the seminar, the participants visited a number of the best farms in Brest Oblast where together they became convinced that peasant enterprise and economic sharpness can be of great assistance in solving the food problem.

Thereafter they continued their discussion of methods for developing the agro-industrial complex, a discussion which began at the opening of the seminar-conference.

During the final plenary session, a speech was delivered by secretary to the CPSU Central Committee O.D. Baklanov.

#### Speech by O.D. Baklanov

The March Plenum of the Central Committee opened up new opportunities for agricultural development primarily by means of a change in economic relationships in the rural areas. This was discussed thoroughly by Ye.K. Ligachev in his report delivered on the first day of the seminar.

It goes without saying that in order to increase agricultural production the economic measures must be reinforced by the required degree of technical re-equipping. For it is a totality of these factors that make it possible to raise labor productivity sharply in the rural areas.

And the present status of affairs with regard to the creation and production of modern equipment for agriculture and the processing branches is not in keeping with the tasks assigned by the party and thus we are not satisfied with it.

Recently, the assistance of the defense branches of industry, which are playing an increasingly greater role in supplying agriculture and the processing branches with equipment, was enlisted for the purpose of solving these problems.

This is an important sign of the times.

Certainly, as you know, the peaceful Soviet initiatives advanced by M.S. Gorbachev have made it possible to commence solving such important international problems as mutual arms reductions. This has obviously made it possible, without infringing upon the country's defense interests, to utilize a portion of our defensive potential for solving national economic tasks.

It bears mentioning that over the next 7 years the defense branches must supply the agro-industrial complex with 17 billion rubles worth of equipment and spare parts. For 1995, the plans call for the production of equipment for the processing branches to be increased by a factor of almost five compared to 1987.

By that time, 90 percent of the machines being produced must meet the requirements for the international level. This implies a modern mass technology, reliable operations, an acceptable price and production line operations. What has been accomplished?

More than 340 plants of the defense branch are now engaged in the production of machines.

Understandably, the established task could not be solved in the absence of a strong scientific base. Thus more than 200 NII's [scientific research institutes] and design bureaus of the defense complex and leading scientists and specialists are now participating in carrying out this work.

As you can see, the agro-industrial complex now has a strong assistant and we have every reason to expect serious improvements in solving the established tasks.

A year has passed—according to present standards, a considerable period of time. What value can we place upon today's status of affairs?

It can be stated directly that, given the requirements of perestroyka, the results should be greater than they are. The organizational period was prolonged. The existing lag in the production and delivery of equipment is being eliminated only slowly. USSR Minaviaprom [Ministry of the Aviation Industry] did not fulfill its plan for production volume. Such an attitude towards the work can in no way be justified for the defense industry. This year, all measures must be undertaken to correct the situation.

But following the March Plenum, the question becomes even broader in scope!

Today, during our conference, discussions are being held on how family farms of the population and the subsidiary farms of industrial enterprises can operate more efficiently in behalf of the food market. As experience has shown, they are making it possible to solve more rapidly the established task. We have all familiarized ourselves with the equipment models presented in connection with our conference. Agricultural workers have an extreme need for this equipment. However, figuratively speaking, the production volumes are suitable only for the carrying out of exhibits. It was during trips to farms and plots in Omsk and your oblasts that we became convinced that this is one of our common ailments. Shame fell upon our industry when we saw, both in Omsk and here, home-made items of equipment and assemblies which were made by skilled craftsmen literally out of scrap metal. I do not believe that there was one leader of industry who viewed this scene who remained indifferent to it: it was a direct reproach to our attitude towards the priority requirements of the rural

The question concerning this equipment is not a simple one.

When you realize that a family farm requires a minimum amount of equipment, such as a small tractor or motorized unit with detachable implements, a separator, pump and some other items of equipment for processing products, then it becomes apparent that the cost for such equipment will range from 2,000-3,000 to 4,000-5,000 rubles.

The above figure can then be multiplied by the number of private plots in the country—more than 50 million. The result is in excess of 100 billion rubles.

And what is our industry doing today?

In 1988, Minavtoselkhozmash [Ministry of Automotive and Agricultural Machine Building], the responsible organization, produced 160 million rubles worth of light equipment for agriculture, including pitchforks and shovels. The entire defense complex—less than 150 million rubles worth.

The 1989 plan for the production of individual products in the defense branches fluctuates within the limits of 10,000-40,000 items annually. It would be appropriate to refer to such production volumes as being experimental batches.

Unfortunately, we have not been able to ascertain how much of this equipment is being made throughout the country. It is obvious that nobody is devoting serious attention to this question. I do not believe I would be wrong in stating that the overall total does not exceed I billion rubles. In such a case, we would require more than 100 years in order to solve the established task at the current rates. You will no doubt agree that these are dismal figures. Radical measures are needed in order to increase the production of this equipment.

Of all of the items considered to be in short supply in the rural areas, I would single out two as being of considerable importance: small tractors and motorized units. Today the production of these items is extremely limited. The situation at the present time is such that the problem cannot be solved through the efforts of just one branch. Yet it must be solved and time will tolerate no delay. Thus the machine builders and defense workers must cooperate in a manner so as to organize in a rapid manner the mass production of those items of equipment which are in short supply.

And what is being done in the ministries in connection with the production of these goods?

Let us examine the situation. Even in 1990, many ministries will not achieve 1 ruble worth of consumer goods per ruble of wage fund. In Minaviaprom, this indicator will be only 53 kopecks, Minsudprom [Ministry of the Shipbuilding Industry]—52, Minelektronprom [Ministry of the Electronics Industry]—83, Mintyazhmash [Ministry of Heavy Machinery Manufacture]—41 kopecks and others.

At this point, I would like to direct the attention of those leaders of ministries and particularly the defense complex, who are in attendance, to the need for a sharp turn for the better in light mechanization for agro-industrial

operations. It bears mentioning that this would be especially profitable for a producer, since an increase in the production of consumer goods would provide the collective of an enterprise with great material advantages.

Further, much of that which is required for working the land, tending the crops and processing the products must be solved directly in the regions. The production of many types of relatively simple items of equipment (cultivators, rippers, mixers, separators and others) can, in the absence of special conditions, be organized at any machine building enterprise. Here a need exists for initiative and persistence by the local soviet and party organs and also for the use of the new managerial methods for this purpose. Thus a need exists for actively enlisting the aid of cooperators, individuals and lease-holders such that they, without arousing any dissatisfaction, will be able to solve this exceptionally important task for the country. In short, extensive use must be made of the local potential.

In particular, I would like to direct attention to the need for increasing the role played by science in the technical re-equipping of agricultural production and in the processing of its products. Here I have in mind first of all the strict coordination of efforts.

A certain amount of experience accumulated in collaboration with organizations of the agro-industrial complex in creating equipment for the processing of agricultural products has shown that the design and scientific organizations of a client are isolated and interact poorly. Various artificial obstacles, formal and bureaucratic barriers, commencing with planning and ending with the organization of work on the whole tend to arise.

It was for these reasons that success was not achieved last year in producing the planned quantity of experimental models of new products, in carrying out tests on them or in mastering the series production of the planned number of machines.

The organization of this work is in need of radical restructuring. Moreover, there is no need for fabricating anything. Here the foundation must be the principles underlying the development and organization of the production of military equipment, principles which have proved their effectiveness over a period of many years. In essence, a reliable operational system has been created. This experience must be utilized completely and as rapidly as possible for the creation and production of equipment for the agro-industrial complex.

Only the use of the entire arsenal of resources accumulated by the defense workers and particularly their systematic approach can provide an all-round solution for the established tasks.

The advantage offered by the systematic approach employed by the defense branches for solving a problem can be illustrated by using Minsredmash [Ministry of Medium Machine Building] as an example. This ministry, within a very short period of time, created an entire series of standard dairy plants of varying productivities, capable of satisfying all requests. Moreover, the keys to these plants are turned over directly to the client by the ministry.

It bears mentioning that we are employing such an approach for light equipment. I would like to emphasize in particular to those defense workers in attendance here the importance attached to constantly bearing in mind that all of the equipment created by their complex must necessarily meet the modern requirements. It cannot be otherwise.

Mention must be made of the manner in which a requirement for needed equipment is formulated. Unfortunately, ill-considered tasks seriously interfere with the work of industry. Refusals to acquire equipment already produced are still continuing.

It is interesting to note that in these instances nobody bears responsibility. This is wrong and under present conditions it is completely intolerable. The relationships between a client and a producer must be linked together economically and it would be well to do so right down to specific individuals, so as to ensure that ill-considered actions on their part are reflected in their own pockets.

There is still one other important question which those who operate equipment find disturbing.

I have in mind the area of servicing and maintenance. Here again there is an absence of proper order. The people experience great inconveniences when breakdowns occur and a need exists for receiving assistance from the center in order to correct them. It is felt that a producer must organize this work himself. Here it should be borne in mind that in the various regions there are many small and large repair establishments within the agroprom [agro-industrial] system. They could be used for creating well equipped centers for providing services for the territory of an oblast or several oblasts.

I would like to direct the attention of those leaders of party and soviet organs and industrial enterprises who are in attendance here to the fact that equipment repair is a very important question and that maximum assistance should be furnished in organizing all-round servicing and maintenance, with use being made of the available local potential.

We already have fine examples of active interaction in the solving of this task. Thus, for example, the leaders in Chelyabinsk Oblast are making available to Minobshchemash a special facility for organizing servicing and maintenance for the equipment being produced by it and in use throughout the oblast. Subsequently, the services and the territory for the servicing work will be increased. It is important that there be a master for the carrying out of this work.

Permit me to add a few words concerning the subsidiary farms of enterprises. They furnish substantial assistance with regard to solving the food problem. Those leaders who apply themselves seriously and informally to this work are achieving high results.

Within the defense complex, a great deal is being done with regard to developing these farms. Approximately 220 million rubles are being invested annually for their expansion.

It should be borne in mind that the subsidiary farms of enterprises can increase the production of agricultural products faster than in any other area as a result of their potential, the introduction of mechanized lines and intensive technologies and others. Here importance is attached to ensuring that the local organs provide the needed assistance in the allocation of land, seed and young livestock.

There is still one other important aspect. It is believed that more energetic measures must be undertaken in the various areas with regard to solving the problems concerned with placing low profitability and unprofitable sovkhozes and kolkhozes at the disposal of enterprises. Everyone stands to profit from this. Available experience confirms this fact and speaks for itself.

Thus, for example, the backward "Mayak" Sovkhoz was turned over to the Nytva Metallurgical Plant, which is located in Perm Oblast. The milk yields amounted to less than 2,000 kilograms per forage cow, the herd had been neglected and the productivity of the grain crops did not exceed 10 quintals per hectare.

As a result of use being made of the enterprise's potential and thanks to the efforts put forth by the interested people, literally within a period of 4 years the grain productivity was raised to 34.2 quintals per hectare and the milk yields per forage cow exceeded 5,000 kilograms. Here, 36 kilograms of meat and 138 kilograms of milk are being produced per worker. The farm is now operating on a profitable basis.

This became possible owing to the fact that the plant, relying upon its own resources, built new cow barns and pigsties and it automated and mechanized all of its heavy manual operations. Practically all of the equipment needed was produced at the plant.

Judge for yourself, could this task have been solved by a backward sovkhoz? Certainly not.

In 1988, the subsidiary farms of the defense complex obtained 17 low profitability and unprofitable sovkhozes and kolkhozes. This process should be developed further with the aid of local party and soviet organs.

In conclusion, I would like to add the following.

Today, nobody can ignore the need for solving the food problem. It touches upon all spheres of our society and each Soviet individual.

Much is being accomplished and yet immeasurably more still remains to be done.

At the present time, the decree handed down during the March Plenum of the Central Committee is the center of attention. Radical improvements in solving the food problem and, it follows, perestroyka on the whole, are directly dependent upon how actively the program outlined in this decree is implemented.

The podium was taken over by 1st secretary of the Central Committee of the Communist Party of Belorussia Ye.Ye. Sokolov.

## BSSR First Secretary On Agricultural Situation, Potential

18200330 Minsk SOVETSKAYA BELORUSSIYA in Russian8 Apr 89 p 2

[Apparent text of a 6 April speech in Brest by BSSR First Secretary Ye.Ye. Sokolov]

[Text] Dear comrades! We view this present seminar as a continuation of the great work started in our country in connection with implementation of the decree handed down during the March Plenum of the CPSU Central Committee.

In welcoming you to our Belorussian land, we have attempted to do everything possible to make your visit here useful and fruitful, such that each one of you, upon leaving, will take away not only the thoughts and ideas developed during the seminar but also good recollections of the republic and its people.

At the same time, we regret that we have been able to show you only a small amount of the work being carried out in the agricultural sector of our Soviet Belorussian economy.

So that you might have a more clear and complete picture, I would like to outline briefly and in a condensed form the strategy and tactics of the republic's party organization in solving the food problem.

First of all, it should be noted that our basic approaches for developing the agro-industrial complex, developed during a meeting of the republic's party-economic aktiv, conform fully to the aims set forth during the March (1989) Plenum of the CPSU Central Committee.

The principal path selected by us calls for the solving of a threefold task: strengthening the logistical base of the kolkhozes and sovkhozes, converting all of the agricultural branches over to the industrial basis and the extensive use of intensive technologies; restructuring of economic relationships in the rural areas, emancipation of the peasants and overcoming their alienation from fixed capital and the means of production; social restructuring of the rural areas, improving the working and living conditions and development of the private plots of the population, the subsidiary farms of enterprises, collective horticulture and gardening. Experience has confirmed the effectiveness of this path.

First of all, at enterprises with modern technologies and compared to those with conventional ones, the average daily weight increases are higher by a factor of 1.5-2, feed consumption is less by a factor of 2.5 and labor expenditures for the production of a unit of product—lower by a factor of 3-4. At a modern farm for the fattening of cattle, one operator services 700-1,000 animals and at hog raising enterprises—1,500-2,500 head.

Secondly, industrial technologies make it possible to improve the quality of the products. At the present time, 95-98 percent of the cattle being supplied to the meat combines by modern enterprises are in a high state of nutrition.

Thirdly, the creation of enterprises with modern technologies is having a positive effect with regard to strengthening the farm economies and primarily because they are released from the need for producing products which under their conditions would be unprofitable or of low profitability.

Fourthly, the character of the work is changing radically. It is becoming highly mechanized and highly productive and thus more attractive to youth.

And finally, advantages are being created from the standpoint of developing an infrastructure, the construction of settlements with comfortable apartments, the asphalting of streets, high quality schools, stores and enterprises for providing cultural, medical and domestic services.

The republic has a firm rule: production installations are erected simultaneously with socio-domestic installations. One element may lead another in creating the infrastructure, but at no time should one fall behind. For example, at the Belovezhskiy Sovkhoz-Combine, 289 apartments, a school, a kindergarten-nursery and a dispensary had been built prior to the enterprise being turned over for operation.

During three years of the current five-year plan, the average annual amount of housing placed in operation increased by a factor of almost 1.5. The average annual number of cultural-educational institutions placed in operation also increased by a factor of 2.2 and intra-farm roads—by a factor of 3.4. The task of installing civic improvements in villages consisting of 20 or more homes is being solved successfully. During the last year alone, asphalt has been laid on the streets of 2,490 villages.

I have cited only five factors, five confirmations of the fact that we have selected the correct line. Certainly, there are considerably more of them.

At the present time, more than one half of the republic's pork and one out of every five tons of its beef are being produced using industrial technologies. We plan to double these indicators by 1995. Towards this end, a program has been prepared for the development and placement of modern livestock husbandry enterprises.

In conformity with this program, each rayon must include an enterprise for the fattening of 10,000 head of cattle annually and also, depending upon the size of the rayon, 1-2 farms for the fattening of 5,000-10,000 head of non-technological cattle, that is, cattle purchased from the population. We defined the optimum variant for swine husbandry as being an enterprise for 54,000 head. In the large regions we are building facilities for 108,000 head and in smaller ones—for 27,000 or 24,000 head.

And now a word or two about dairy livestock husbandry. Over a period of 3 years, the increase in milk amounted to 652 kilograms and the milk yield per cow last year reached 3,154 kilograms. Nevertheless, it can be said that we are not satisfied with these indicators. We are aware that this by no means meets today's requirements.

Today practically all of the farms are engaged in milk production. We intend to continue this approach in the future. Under the conditions found in the republic, with 70 percent of the soil being of a sandy or sandy-loam texture, good results are being obtained only by those farms where the density of the animals is not less than 100 head of cattle per 100 hectares of agricultural land.

Obviously, the program for converting livestock husbandry over to modern technologies and to an intensive basis is reliant upon science and upon strengthening its links with production. Greater use is being made of the achievements of biotechnology. Last year alone, 778 embryonic transplants were carried out at 13 transplantation centers and points. The introduction of the method of embryo transplantation will make it possible in the near future to supply the republic's state breeding enterprises with sires obtained from the better animals and also to create highly productive donor herds in each rayon

Selection-hybrid centers serve as the principal connecting links between the breeding plants and swine husbandry enterprises. They are being created in all of the oblasts.

We are employing a new approach in the development of feed production. Up until recently, one of the branch's chief considerations was the accumulation of a maximum amount of feed units. The quality of the feed and the balancing of the rations were of secondary importance. In actual practice, this led to a situation in which the high quality haylage was replaced by silage, with a shortage of good hay being compensated by straw and a shortage of good quality mixed feed—by coarsely milled grain.

Today we are doing everything possible to ensure that all of the fields and lands are used in behalf of feed, with the exception of that portion needed for the production of marketable products and for the creation of seed funds. People working in feed production are being provided with land, equipment and other logistical resources and their interrelationships with the livestock breeders are being based upon purchase-sales principles.

In order for these principles to be applied fully, one side must know what it is producing and selling and the other side—what it is purchasing and using. Objective evaluations and parameters can be furnished only by the agro-chemical laboratories. At the present time, they are found in each rayon and on 957 of 2,559 farms.

With regard to farming, by the end of the next five-year plan the norm for the republic must be a grain productivity on the order of 35-40 quintals per hectare. Objective conditions are being created for obtaining not less than 300 quintals of potatoes per hectare.

I have already mentioned the March Plenum of the CPSU Central Committee and I would like to repeat here that our personnel, while intensifying their work directed towards converting agricultural production over to an industrial basis, are at the same time firmly convinced of the need for restructuring production relationships in the rural areas. Moreover, we believe that the combining of large-scale production with the use of leases represents an important path to be followed for increasing the production of agricultural products and for improving their quality and lowering expenditures.

The collective of the swine husbandry enterprise for 24,000 head at the Dubno Kolkhoz in Mostovskiy Rayon in Grodno Oblast is in its second year of operation under lease conditions. Here the average daily weight increase is 504 grams and for a group undergoing fattening—560. The production profitability has exceeded 58 percent.

Life persistently demands the formation of highly specialized branch systems. For example, on the average an oblast of our republic sells approximately 60,000 tons of pork annually. For its production and processing, we create a scientific-production system in each oblast that includes all of the swine husbandry enterprises, a selection-hybrid center and other subunits needed for achieving high operational results. We became convinced regarding the advantages offered by this form of integration after noting the operational effectiveness of this system in Vitebsk Oblast.

In connection with the need for closer integration of the efforts of the agrarian sector and industry, I would like to direct your attention to still another aspect.

We are striving to stimulate more active use of an important reserve for increasing the supply of food products—the subsidiary farms of enterprises. We have 1,870 of them. They have almost 84,000 hectares of agricultural land at their disposal.

However, their effectiveness continues to remain low. Thus we have decided to follow the route of cooperation in the use of the resources of industrial enterprises and organizations for the creation of livestock husbandry farms and complexes and hothouse combines and the construction of fruit and vegetable storehouses.

The system here is as follows. An association or a group of enterprises and organizations, using their own resources and their own funds, build a farm or a complex which is operated by a kolkhoz or sovkhoz. A portion of the output is delivered on a contractual basis to those labor collectives that created the production capabilities, depending upon the resources invested. The remaining output is placed at the disposal of the farm. Indeed, it supplies the complex or farm with feed, man-power and so forth

A program developed by the Minsk gorispolkom [municipal executive committee] calls for the use of 85 million rubles worth of enterprise and organizational funds for the construction and modernization, at kolkhozes and sovkhozes throughout the oblast, of 15 livestock husbandry complexes for 186,000 head of cattle.

Thus the Minsk Tractor Plan turned over 1.8 million rubles to the Logoza Sovkhoz in Logoyskiy Rayon for the construction of a swine husbandry complex. Overall, it invested 8 million rubles in this enterprise. In return, the sovkhoz, over a period of 10 years, will supply the tractor builders with 500 tons of meat annually. Economic computations have shown that such cooperation is profitable to both the plant and the farm.

Our personnel are devoting are devoting a great amount of purposeful effort for the development, including on an inter-farm basis, of a hothouse economy, horticulture, apiculture and a fishing economy. Figuratively speaking, good fish are being caught not only in the water areas of fish farms, kolkhozes and sovkhozes, but also in the departments of plants. I did not make a mistake with the latter statement: the subsidiary farms for the production of fish have become full and equal departments at a number of plants in Gomel and Mogilev Oblasts.

Within the republic, an all-round approach is being employed for developing the private plots of citizens. We are striving to ensure that this question is not resolved separately from public production but, to the contrary, it should have strong and mutually advantageous economic and organizational links with it. A committee for

developing the private plots of citizens, headed by the deputy chairman of the Presidium of the Supreme Soviet of the Belorussian SSR has already been in operation in the republic for a year and a half. Similar committees are attached to the ispolkoms [executive committees] of oblast, municipal and rayon soviets of people's deputies.

We assigned the task and we are solving it in a consistent manner: similar concern for the private and public farms must be displayed by the leaders and specialists of kolkhozes and sovkhozes and by the executive committees of local soviets.

The tracts of land for kolkhoz members and sovkhoz workers are allocated as a rule out on the crop rotation fields. What does this accomplish? A peasant actually senses concern for himself and for his family. The plots out on the crop rotation fields are worked using the farm's equipment, an exchange of planting stock strains is carried out and an entire complex of operations for combating weeds and plant pests is implemented. The crops are harvested also using the machines of the kolkhozes and sovkhozes. As a result, the people have time for carrying out their own work, for training their children and for participating more actively in public production.

The kolkhozes and sovkhozes have undertaken to supply the private plots with young cattle stock, hogs and poultry. When necessary, the kolkhoz members or sovkhoz workers, with the assistance of the farm, can replace those cows which because of age or other factors are no longer fully productive.

Last year the kolkhozes and sovkhozes sold 3.9 times more young cattle stock to the population than they did in 1980, young pigs—more by a factor of 2.1 and poultry—more by a factor of 1.9.

The problem concerned with making pasture land and feed available for the animals on private plots is being solved. In the majority of instances, continuously cultivated pastures are being made available for this purpose. Coarse feeds, including perennial grasses, are being made available depending upon the numbers of livestock on the peasant plots.

I believe that we have succeeded in finding an approach for supplying the private livestock with grain forage. In accordance with a decision handed down by the Council of Ministers of the Belorussian SSR, the kolkhozes and sovkhozes are authorized to sell up to 9 percent of their gross grain yields to the peasants in the form of payments in kind. In this manner the labor activity of the people is stimulated to a considerable degree. Moreover, last year the enterprises of consumer cooperation sold more than 400,000 tons of mixed feed to the population in the form of counter sales.

All of this is having a positive effect with regard to increasing the contribution by private plots towards solving the food problem. Last year 1,081,000 tons of milk were purchased from the population—more by a factor of 2.1 than the amount purchased in 1980. Each family having a cow sold on the average 1.5 tons of milk to the state. Milk purchases increased almost twofold over the past 8 years.

Today the private plots of citizens are producing one fourth of the entire gross agricultural output. They account for 16 percent of the meat and 24 percent of the milk being produced in the republic. We view collective horticulture and gardening as substantial means for increasing the production of food goods, especially vegetables and fruit. There are now more than 300,000 families attached to 2,265 horticultural collectives. They have been allocated 20,000 hectares of land. This year the plans call for 60,000 more plots to be made available. One out of every four municipal families will be engaged in collective horticulture and gardening.

Such are the principal trends in our work. And man is to be found in the center of each of these trends. It is easy to note that we have the one goal with regard to the introduction of modern technologies, implementing improvements in economic relationships or integrating the efforts of all participants in agro-industrial production.

It is our intent for man to become the master not just in words but also in actions, to work in an industrious manner and in a fine mood and to realize a high return such that his living conditions enable him to a greater degree to use his free time—a chief wealth of any civilized society—for harmonious development.

It is precisely in this area that we see a need for perestroyka.

In conclusion, permit me to wish you new endeavors, great accomplishments in carrying out the aims of the March Plenum of the CPSU Central Committee, good health and happiness.

# Feed Problems Force Increases in Meat Prices

# Search for Solutions

18240142 Moscow PRAVDA in Russian 8 Apr 89 Second Edition p 2

[Article by Nikolay Timchenko: "Search for Solutions"]

[Text] It was only recently that an event took place which was not published either in the newspapers or over the radio, at least in the Moscow media. An experiment was completed at the Mayak Sovkhoz in Cherkassk Oblast. Two groups of hogs underwent fattening regimes: one group was fed mixed feed purchased from the state for 20-22 kopecks per kilogram and the other was fed a mixture of internally produced crushed corn grain (4

kopecks per kilogram) and soybean oil-seed meal. After the fattening schedules and the daily weight increases for each animal were taken into account, it was revealed that the production profitability for pork in the first group amounted to 5 percent and in the second—139.

What is the importance of this for us as far as you consumers are concerned? The fact that with such indicators there should be no need to raise the price for meat. Moreover, the price might even be lowered. The same holds true for the production of broilers, the meat of which for us is for one reason or another more expensive than beef or pork, whereas in the U.S.A. the situation is just the reverse. Why is it that extensive use is not being made of some experiments?

Today everyone is talking about the problem of supplying the country with food goods. Particularly meat. The average annual per capita amount is 65 kilograms.

Moreover, persistent discussions are taking place over the considerable degree of unprofitability associated with the production of meat and other livestock husbandry products and the huge state subsidies for covering the increasing expenditures of the kolkhozes and sovkhozes. As a result of these arguments and the calculations by economists—it would appear as though the sword of Damocles poses the threat of a total increase in prices. Against the background of increasingly inflationary processes, this is already being viewed by many as something inevitable that is disarming society and weakening its determination to search for alternative solutions.

Let us take meat production. Its level reflects more accurately the status of affairs in all of the related branches. Thus, is it possible to create a single concept for our agriculture, one which is inclined towards livestock husbandry operations? Once the remaining branches have been made subordinate to livestock husbandry, each element will then carry out its assigned work on a production line basis. And at the end of the production line—the meat and dairy products.

These written comments were motivated by a trip to the U.S.A. last autumn. More exactly, to those states in the midwest which constitute the corn belt. Our delegation—the leaders of a number of farms, a scientific worker and a journalist—was invited by the American Soybean Association. By visiting scientific-research and experimental laboratories of universities and large companies in the states of Iowa, Illinois, Indiana and Minnesota, enterprises for the storage and processing of soybeans and for the preparation of mixed feed and various preparations and additives, slaughtering points and, most importantly, the farms themselves, we were afforded an excellent opportunity for acquainting ourselves with an orderly feed production system. And based upon this system—meat production. It is difficult

to state which of the elements was of the greatest importance. But nevertheless the leading element was the production of soybeans and corn.

It is known that for many years our literary giants and beginning journalists have discussed and are continuing to discuss corn in their writings. The stereotype of an all-union leader is one who spiritedly waves a yellow ear of corn from the tribune as he appeals for corn to be planted "as far north as Arkhangelsk," thus revealing the extent to which this subject has become a firm part of reality.

If we tell them that last year, on farms in this same Arkhangelsk Oblast, corn was grown for grain, not to mention procurements of excellent silage and similarly on thousands of farms in the non-chernozem zone, the Urals and Siberia and that today we cannot conceive of livestock husbandry operations being carried out in the absence of corn feed, they view us at best as being reactionaries.

The reader is already perplexed: the author began a discussion on American soybeans and has now shifted over to Arkhangelsk corn. I hasten to explain there is nothing illogical in this. In traveling about the abovementioned midwestern states, we noted how out on the fields corn replaced soybeans and soybeans—corn. Soybeans followed by corn and corn followed by soybeans.

Corn is the queen of the fields in terms of the energy content of its grain and soybeans—the queen in terms of all indicators, but most of all because of its protein content (up to 54 percent) and oil content (up to 27 percent). Moreover, both of these crops are of high quality. Hence we have here an explanation of the well-being of the states from the standpoint of food. Moreover, they are not alone in this respect.

In our immense country, we have everything: intense heat and cold, dryness and moisture. We have zones and entire regions that are fully favorable for the growing of soybeans. For example, there is the Kuban region and the expanses of the Ukraine, the Volga region and Central Asia.

At not time have the Americans overlooked this important combination: in those areas where corn is being grown for grain, they have also sown equal amoubts of soybeans. In a crop rotation plan, these two crops serve as predecessor crops for one another. On the farms, milled corn grain in a mixture with soybean oil-seed meal plus a premix serves as a ration which ensures the highest average daily increase in animal weight, minimal feed consumption, high quality meat and a low production cost for its production.

Certainly, when necessary the soybean oil-seed meal can be replaced by rape or sunflower meat and bone meal. Only they should contain the required amount of full value protein. But it cannot serve as some type of miracle-additive replacement, similar to that which is publicized the methodically by SOVETSKAYA KULTURA. Moreover, free of charge (at a time when advertising is becoming dreadfully expensive). Here we have in mind the so-called protein additive "Mintrat X" of the American Murman Manufacturing Company. It is capable of immediately supplying us with an abundance of meat, dairy and other products. Three times over a period of 6 months, through one of the firm's brokers, the newspaper blamed our Gosagroprom officials for the fact that they were hindering the introduction into operations on our farms (and not free of charge) of a miraculous additive. In one of its publications, it brought forth, so to speak, its "heavy artillery"—VASKhNIL [All-Union Academy of Agricultural Sciences imeni V.I. Lenin] Academician V. Tikhonov. Willingly seizing upon the polemical enthusiasm of the foreign businessmen and having discussed other truly important and necessary things, somewhere towards the end of the interview the academician transformed the "Mintrat X" additive into a personification of the American technology in the broad sense, thanks to which the Americans, it is said, "are fully able to satisfy the needs of their own people and still export agricultural raw materials and products."

As an eye-witness, allow me to boldly state that an "American technology" based upon the mentioned additive does not exist in life. Moreover, the farmers and also managers with whom we spoke had no knowledge of a "Mintrat X" additive when we questioned them. Indeed, there was a large number of premixes there representing various firms and differing in their names and recipes.

It bears mentioning that we are also preparing such premixes. And that there truly is a great shortage of protein feed, particularly soybean oil-seed meal. By flavoring the usual premix with a small dosage, an attempt is made to beat the foreign firm in terms of price, which is twice as high as the international price. Purchases made at such prices simply spells ruin. Yes and comparative experiments carried out at the Ladozhskiy Sovkhoz in the Kuban region did not reveal any advantages for this additive. The position taken by the Gosagroprom [State Agro-industrial Committee] would be surprising if they did not make these facts available to the editorial board.

I have before me a note by A. Dusheyko, a senior scientific worker at the Scientific-Research Institute of Biochemistry imeni N.A. Palladin of the Ukrainian Academy of Sciences. In citing a number of depressing facts concerning the failure of scientists in the face of the incresing requirements of society for scientific support for agricultural production, the author writes that up until now many have reasoned as follows: there will be grain and there will be meat. It is hardly necessary to argue this point. It is said that we need 1 ton of grain for each individual. This would be good. And yet here is a curious statistic. In the U.S.A., 700 kilograms of grain (food and feed) are consumed annually per capita, in

France—530 and in the Netherlands—339 kilograms. In the case of meat, the Americans produce 120 kilograms per capita, France—100 and the Dutch people—136 kilograms. Taking into account our own and purchased grain, we use approximately 700-800 kilograms of it. We produce only 65 kilograms of meat. The problem has to do not only with the amount of grain, but also with the technology and effectiveness for converting it into meat.

The author of the letter further noted that all of these examples underscore the great lack of knowledge at all levels of Gosagroprom management and also the backward nature of our agricultural science.

Perhaps A. Dusheyko has exaggerated somewhat and yet I can testify to the fact that all scientific resources are being employed in the U.S.A. in each livestock husbandry state. This is described in detail in five issues of the weekly summary to the newspaper SELSKAYA ZHIZN, entitled VESTNIK AGROPROMA (Issues 4-8 of 1989). The advanced science of the U.S.A. is truly located, as still only recently we liked to state, at the leading edge of production. Another question entirely is the motives underlying this fact.

And what is our status in the area of soybeans today? What are the prospects for the future here? According to data supplied by Gosagroprom, it was grown on 865,000 hectares last year. An average of 11 quintals of beans was obtained from each hectare. Instead of 386,000 tons, 479,000 tons were purchased. As you can see, the plan was overfulfilled. Pleased? But certainly! The Food Program calls for the annual gross yield of beans to be raised to 2.2-2.3 million tons during the 12th Five-Year Plan.

In discussions with competent people, we often hear: a good crop produces much protein and oil, but for some reason this does not happen in our case. Something else is needed. Based upon the reliable monograph entitled "Soybeans," published by Agropromizdat [Agro-Industrial Publishing House] in 1984, it is known that soybean research work is being carried out by more than 50 scientific organizations in various zones of the country and that more than 50 varieties of soybeans have been developed. For what purpose? Is this not similar to the parable about the ill-starred hunter who sees the bear and then searches for its tracks? And it should be mentioned that one of these tracks is still attracting the attention of some individuals today. The cheerful reports concerning the fulfillment and over-fulfillment of the plans and obligations for grain sales are still fresh in our memory. The gross figure at any cost—the amount of grain threshed direct from a combine hopper—this was the end in itself. And a roll of the kettle-drum sounded the end of the urgent phrase in the reports of those years: "in some areas, a grain crop yield of 50-60 quintals per hectare was obtained." And then there were the soybeans with an average yield of 20 quintals. Meanwhile, if the count was based upon the protein yield

per hectare, then even with a wheat yield of more than 80 quintals the soybeans still maintained their superiority, the biological value of which is incomparably higher.

We have known about soybeans for more than a century. Although difficult to believe, we even exported it from western Georgia: on the average, approximately 10,000 poods of soybeans were exported during the 1909-1913 period. According to today's scales, this is a miserly amount. But we must live for the moment when we will be entirely free of imports.

Today, with the March Plenum of the party's Central Committee having opened the way for creative initiative by agricultural workers and with the path being cleared for the use of new managerial methods in the production of soybeans and other high protein crops, it is believed that not only the kolkhozes and sovkhozes but also leaseholders, cooperatives and family teams will become interested in carrying out this work. It is a very worthwhile and extremely important task.

Certainly, it would be simpler to cite the causes for the lag in the production of meat and milk and for their high production costs. But would it not be better to find solutions for the problems concerned with production intensification and achieving scientifically sound and skilful management?

Follow-Up Commentary by Academician Tikhonov 18240142 Moscow SOVETSKAYA KULTURA in Russian 15 Apr 89 p 2

[Article by Academician V. Tikhonov: "Search For Solutions"]

[Text] It was with great interest and some surprise that I read the polemical notes by the rather well known and experienced journalist N. Timchenko, published under the title "Search for Solutions" in the 8 April issue of PRAVDA. I am in absolute agreement with the author: the structure of our grain economy is not at all in keeping with the specific requirements of livestock husbandry and is in radical need of restructuring. Since SOVETSKAYA KULTURA does not specialize in the subject of agricultural economics, I will try to explain the essence of this question as intelligibly as possible.

Wheat constitutes on the order of 46-48 percent of our gross yield of grain, that is, we annually grow up to 95-96 million tons and quite recently we grew up to 100 or more million tons. Wheat is a bread grain and is not suitable for feeding to livestock because of its low economic and biological effectiveness. Meanwhile, we have systematically increased its production volumes, which now exceed considerably our own wheat requirements for food purposes. To this we must add the mass purchases of grain on the foreign market—up to 15-20 million additional tons. That is, we are fully aware that we are purchasing and growing wheat for feeding to

livestock. Not one intelligent owner does this. In America the wheat is grown in the quantities needed both for human consumption and for sale on the foreign market. But on the other hand, energy-intensive corn furnishes more than 60 percent of the gross yield and almost 64 percent of the grain consumed. In addition, the Americans grow up to 40 million tons of high protein soybeans, the product from the processing of which—soybean oil-seed meal—contains up to 54 percent or more of protein and also pulse crop fodder. In our grain balance, all of these types of feed constitute not more than 3 percent. This is very little. There is obviously a vital need for increasing our production of corn grain, oil-bearing crops of the soybean type and pulse crop fodder, in the interest of normalizing the forage balance, as stated quite fairly by N. Timchenko in his article.

But these are all generally well known truths. Fifteen years ago, many Soviet economists, including myself, favored restoring the prestige of corn and expanding the soybean sowings, especially on irrigated lands in the southern regions of the country. Many works have been published and many oral statements made. And suddenly I am taken completely by surprise. The author of the "polemical notes," bearing in mind my statement in SOVETSKAYA KULTURA, states, and here I quote, "VASKhNIL Academician V. Tikhonov has transformed the feed additive 'Mintrat-X' into a personification of the American technology in the broad sense, as a result of which the Americans, it is maintained, are fully able to satisfy the needs of their nation and still export agricultural raw materials and products."

I will begin by stating that it is hardly ethical to employ, for the purpose of criticism, a phrase that has been taken out of context. The fact that N. Timchenko proceeded in this manner can be easily verified by reading my interview in your newspaper. Yes, the American farmers are truly satisfying their nation's need for meat and they are exporting meat, dairy and other livestock husbandry products-and there is not need for stating "it is maintained." Is such abundance being achieved as a result of the output of the "Murman" Firm? Certainly not. I am not that naive as to point out this fact to the author of the "polemical notes." The effectiveness of American agriculture derives primarily from the efficient organization of its feed base where, in addition to other feeds, a considerable proportion is provided by energy-intensive high protein crops. Mention should be made here of feed additives or premixes. Protein, vitamin and other additives required for an animal in order to balance the feed with mineral and chemical fertilizers are certainly needed. Many of them raise the effectiveness of any feed, including even our so-called wheat ration. As N. Timchenko wrote, our premixes are also manufactured. But on the whole, our overall culture for the maintenance and feeding of animals is so primitive that we often are unable to detect the type of effect that these additives will produce. But when I commented upon the letter by Piter Marsi in SOVETSKAYA KUL-TURA, I was not at all interested in whether or not we

needed the "Murman" Firm's preparation, although I am convinced that we need it to a certain degree, nor was I interested in whether or not we should produce these additives ourselves, spending hundreds of millions if not billions of rubles for the production of synthetic protein. Actually, we could at the same time grow this protein naturally together with soybeans, pulse crops, peas and others. I was disturbed by something else: the irresponsible attitude of the official apparatus towards any, and I repeat, any recommendations from abroad. Piter Marsi was quite logical: if everything is being produced and everything is available in the USSR, then why does our country have to purchase tremendous amounts of grain repeatedly? And why is it that our clumsy technology turns out to be completely unresponsive to whatever new methods are being employed abroad? There is obviously a need for a colossal steamroller capable of crushing the bureaucracy which is authorized to make such decisions. The incident involving Piter Marsi is not singular in nature. Regardless of the problems which confronted our former Gosagroprom or other departments in connection with collaborating with foreign firms, the same picture appeared in all areas: irresponsible delays in solving problems and eventually unsound rejections. Thus this problem—a social rather than technological one—was raised quite fairly by SOVETSKAYA KUL-TURA and I fully support the manner in which it was formulated.

And the last point. Why is it that the radical restructuring of our system of farming is proceeding so slowly? Is it merely because the structure for the area under crops is being decided by irresponsible officials? No, this is not the only reason. Here we come close to the true reasons for the effectiveness of the American technology, which is by no means personified in the "Mintrat-X" preparation. The large-scale commodity production of any product, especially corn grain, requires an appropriate system of machines and, on the whole, an entire complex of technological systems in which the required machines and necessary chemicals, particularly pesticides and readily soluble pesticides, are combined. Unfortunately however, instead of a system of machines our industry is still supplying only fragments of one. The polemical passion of N. Timchenko could better have been directed towards studying the root causes of our chronic ailment-I would refer to it as a systematic separation of our production structure and scales from the clear requirements for specific products. And so long as we are unable to master this ailment, low production efficiency—regardless of the branch we are discussing—will continue to accompany us.

### POLICY, ORGANIZATION

**Draft Law on Output Quality, Consumer Protection Viewed** 

18270088 Moscow TRUD in Russian 18 Apr 89 p 2

[Roundtable discussion conducted by B. Leonov and S. Snegirev: "Will the Consumer Be Protected?"]

[Text] Representatives of the working group that is working on the draft Law on Product Quality and the Protection of Consumer Rights: V. P. Mozolin, sector manager in the USSR Academy of Sciences State and Law Institute and doctor of jurisprudence; M. A. Ushakov, chief of the USSR State Committee for Standards Administration for Evaluating Quality and Certification, and activists and directors of recently established consumer societies: A. G. Kannabikh, director of the AUCCTU working group for establishing consumer societies; V. A. Nenadyshin and L. A. Bochin, deputy chairmen of the board of directors of the Moscow Consumer Union; P. B. Sheleshch, chairman of the Leningrad Consumer Club; and A. A. Kvedaravichyus, board member of the Lithuanian Consumer Association, came to the editorial board to discuss in a "round table" the draft of this document.

P. Sheleshch: I would suggest that we approach the evaluation of this draft using the same yardsticks with which we would approach any product. You see, a draft is also a product which we to some degree can "use." There are four basic consumer rights in world practices: to be informed, to select, to be safe, and to complain. I will begin with the last one—the right to complain about the draft. Unfortunately, as our experience shows, practically all drafts of laws are doomed to success, that is, to acceptance. No matter how much we have discussed them, the newspapers publish a final version, which essentially differs little from the draft, at the appointed time. Thus, the right to complain is not guaranteed. Nevertheless, our city club has conducted a discussion of the draft-a discussion in which the candidates for USSR people's deputies participated. In the name of consumers, we gave them instructions to express our opinions during the process of adopting this law in the parliament.

Second, the right to select. I would like to see alternate versions so that there would be something to select from. Third, the right to be informed. In my opinion, excuse me for my sharp words, it is difficult for a normal individual to read this document—it is a long and difficult one. In building a legal and democratic state, we should write laws that are brief, simple and clear and that do not have any undefined expressions such as "within the prescribed timeframes".... They should specifically point out: What is stipulated by whom and when and how.

During the discussion in Leningrad, we expressed the following thought: There are seemingly two laws in the draft. One concerns quality calculated for a comparatively narrow category of specialists (the criteria for evaluating quality, the concept of a type of "technically complicated product", etc.). The other part directly concerns the interests of consumers, that is, all of us....

Lastly—the right to be safe. The law requires that our safety be guaranteed. However, is it guaranteed? The draft provides for two ways to defend the interests of consumers. One is the right of the purchaser, who has acquired a poor quality product. However, the draft narrows this right (Article 29) in comparison with the one that is guaranteed in the Fundamentals of Civil Law. The second right is independent protection, that is, the establishment of consumer societies. These rights have been set down, but it is important that they be held responsible for ignoring them so that they will take them into consideration. This is not in the draft. For example, one is permitted to turn to a commission of experts. We appeal to it—and what? They say to us: It is impossible now, we are busy, we have no capability... We, the consumers, should ourselves be given the right to examine goods and products and form our own laboratory bases to do this. It is evident that this should be reflected in the law.

V. Mozolin: To some degree, I participated in the work on the draft and I would like to talk about some of its general propositions. First, it is necessary to look at it along with other laws connected with the economic reforms: the laws on a state enterprise, the cooperative system, individual work activity, etc. This draft is somewhat unusual because it really contains two laws. Can it be divided into two documents? It can. Everything is possible. However, in the situation that has been created and in the period of restructuring where we are shifting from one model of economic development to another, it is necessary to combine the questions of quality and consumer rights protection. If our market was regulated and commodity and monetary relations were established, then, probably, I would agree with it being necessary to issue the second part of the law-about protecting consumer rights—separately. Concerning the problems of quality, they would be regulated separately, mainly by state standard norm and technical manuals, specifications, etc.

Now, concerning the "right to select." It exists even now. If other versions of the law or its articles do not exist, suggest them. No one prohibits this. The new composition of our parliament, the Supreme Soviet, can make this draft null and void in the final analysis and adopt a completely new law....

Retort: But this is not the right to select, but the right to suggest....

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V. Mozolin: I do not think that anyone has monopolized the right to prepare a draft. Moreover, many of my positions also do not coincide with those that have been fixed in the draft, although I participated in its preparation. A large group of people were involved in this work; they worked on variants many times with the scientific institutes. In my opinion, this is a unique draft law whose main developers have been announced publicly.

We considered it necessary to provide some concept of a conventional consumer right in the draft. Whether this turned out to be or not is another question. However, it is no accident that the draft has fundamental positions which contribute to the spirit of our economic and—yes, our legal—reforms. There is a whole series of propositions which are being introduced for the first time as norms for our legislation. For example, the right to be informed on the quality of products. You see, there is nothing like this in our legislation now. Or the right to insure the safety of the consumer's life and health. Our civil laws have no articles like this.

Concerning the criticism of Article 29, I do not fundamentally agree with this. It is not true that it is a step backward. On the contrary, it is a step forward, but—possibly—an insufficient and too timid a one. I should point out that there is not a single country in the world now where the unconditional right of a purchaser to exchange any commodity has been proclaimed. As a consumer, I also would vote for such unconditionality. However, it is necessary to be realists. If we pass such a law, they will begin to violate it.

Question from the hall: What specifically in the draft did you not agree with and do you think that it sufficiently guarantees protection for the consumer?

V. Mozolin: It is easier for me to begin with the second question: Is it sufficient? It is never sufficient. A draft of the new Fundamentals of Civil Legislation should be prepared in 1990 in accordance with the plan for legislative work. These questions will be reflected more fully there and it is simply not recommended to carry them over into this draft. However, it is possible to make many norms here more specific. For example, the article on the "right to be safe".... Although it would be logically correct to precede along another path: first, change the general norm in the general civil legislation, and then introduce it here. That is why I would simply not begin to talk about sufficient or insufficient defense of consumer rights in this draft.

Question: Viktor Pavlovich! Do you think it possible to design a universal law which would embody all of the legal interests of consumer societies?

V. Mozolin: I think that it is impossible to design such a law.

Question: Then why does Article 27 of the draft being discussed dictate everything that consumer societies should do?

V. Mozolin: Apparently this is simply poor wording. You see, a consumer society is a public organization, and the law certainly does not have a right to decide the question of what it should specifically engage in. This would contradict the constitution. The draft, however, provides a definition of the relationships of consumer societies with state agencies and other public organizations and indicates how these societies should be included in the overall system of our relationships. This is legal.

I would like to say the following on this question: A consumer society should be independent of the AUCCTU, the Komsomol Central Committee and any other organization.

V. Nenadyshin: We need a law on quality because, according to several estimates, low quality products represent more than 30 percent of our country's gross national product. We can no longer grind up resources—both raw material and labor—for nothing. How can this question be solved? We established state acceptance which has proven itself ineffective. We produce approximately 10 million television sets a year, and a third of them are of poor quality. However, you see, the state acceptance system is accepting them!

Of course, an effective economic mechanism is capable of finally resolving this problem. However, legal and legislative requirements and responsibility for their carrying out are also required.

The proposed law on quality is basically related to the producer. Only a law on defending our and your—the consumers'—rights can become a law for the consumer. That is why it is necessary to divide the draft law, I suppose, into a law on quality and a law on consumer rights and their protection....

Retort: Or add another—"a law on quantity", considering the sharp aggravation of the shortage and the lack of commodities for the growing incomes of the population.

V. Nenadyshin: ... and define what consumer we are talking about. In Article 5 of the draft, the consumer is the industrial enterprise, the cooperative and the ordinary citizen. How is it possible in one law to defend equally the right of the Volga automotive giant and the retired kolkhoz worker? From a legal and economic point of view, these concepts are so different that it is absurd to combine them in one law—the more so since the enterprise and cooperative are emerging as both the consumer and the producer. The court defends the consumer citizen; arbitration defends the consumer collective.

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Having combined in one document both quality and consumer rights, we are legitimizing only one consumer right—that to quality products. What about his other rights?

Laws are not written for one or two years.... That is why I think that it is necessary to adopt a law on quality and to continue work on a law on consumer rights.

One should not fail to point out that this draft enunciates a very great deal for the consumer. For example, Article 30, which stipulates "responsibility without guilt" is a large step forward even in world practices. You see, some people now, at times, are crippled as a result of using our products. I will recall the tragic story of the youngster, Zheni Arnopolskiy, who was blinded while playing with an electronic toy two years ago. The battery blew up and the electrolyte poured into his eyes. The court examinations stretched for two years and the courts said: No one is guilty. But the young lad, who had undergone 10 operations, remains blind. What then? Is the young lad guilty of the fact that the producer—the Yeletskiy Cell Plant which produced the A-343 Prima battery-provides a product that it is dangerous for children to play with?...

Now, concerning the argument about the comparison of Article 41 in the Fundamentals of Civil Legislation and Article 29 of this draft. True, the consumer can realize what is written in Article 41 by appealing to a court. There have already been several of these cases in Moscow, and the consumer has won. Although departmental legal acts (approved by the State Committee for Standards and the Ministry of Trade) had curtailed civil legal norms, the court nevertheless satisfied the suits of the consumers who had purchased poor quality products. What will happen now if the law keeps Article 29 which limits the rights of the consumer?

Now, in order to replace a worthless item or to receive one's money back, it is necessary that the total time of the work to repair that product in the warranty workshop not exceed 20 days from the time of the consumer's first application. A similar product is given to the consumer during the time that the product is in for repairs. The consumer is paid a forfeit for each day in the event that this requirement is not fulfilled. What is the similar item and what is the amount of the forfeit? It is not stipulated. In a word, whereas previously the rights of the consumer were limited by legal acts, the law itself now limits them—and no court will help....

M. Ushakov: The problem of quality is so painful for us that a law on quality is necessary. It is required whether it appears in the form of this draft or in some other one. The State Committee for Standards, just as consumer societies, also defend the right of consumers to good quality products. In order to defend this right, however, it is first of all necessary to provide such products to the consumer. We talk about this in the first part of the draft law. Under conditions where there are no free market

and no competition, the dictate of the producer flourishes and the purchaser is required to take whatever exists; there is no other way out for him.

This is one item. Another, which has not been heard here today, is that many consumers are still the producers of products. I do not think that the first part of the draft is uninteresting to people. People are the main producers. The following principle should exist: quality for each one, and quality—from each one!

Concerning the rights of consumer societies, they are reflected in Article 27, and this article does not limit their functions in any way; on the contrary, it provides elbow-room for actions. If something is not adequate, let us supplement it or correct it; the general discussion of the draft is taking place for this purpose.

The meeting of the working group, which is working in the government on summing up the comments and proposals on the draft, also expressed the opinion that some of its propositions do not fully reflect the consumers' point of view—in particular, the question of an expert examination. I personally think that it is not obligatory that expert examinations be conducted by consumer society laboratories. To write such a right into the law means to legitimize the obligation to have court and arbitration agencies of consumer society examination boards. I do not agree with this.

Why? The so-called certification by a third party exists in world practices. The third party is not the producer or the consumer. I do not object that such societies provide information about the level of some product or other, create advertisements or counterclaims, or even do testing in their own laboratories (incidentally, it is not written in the draft that they should have such laboratories, but they are not forbidden to).

L. Bochin: There is more than one court case, which aroused the consumer scoiety in foreign countries, which was not lost for one reason. The courts were presented with conclusions reached either by an independent laboratory of the consumer society or by laboratories of the existing firms and their test centers.

A. Kannabikh: I met with representatives from the Dutch consumer association. There they also carry out all the tests at an independent test center. The conclusions which they reach are considered irreproachable and authoritative.

M. Ushakov: Regarding the retorts which were expressed here about the state acceptance system, about its ineffectiveness, I do not agree with its critics. The state acceptance system has succeeded in resolving at least one task—to bring order into the observation of the requirements for normative-technical and design documentation. and it is impossible to reproach the state acceptance system for the fact that televisions are shoddy. It is necessary to look at this in a different way: Do the

produced televisions meet the standards? Watching for this is the direct duty of the state acceptance system—and its responsibility. Whether our standards and specifications correspond to the world level—is another question. Colossal expenditures are required for its solution. This, however, is not a question for the state acceptance system; it is the task of the entire national economy.

- V. Nenadyshin: I have the following information available: 213 people perished in 1985 as a result of fires caused by televisions catching fire; and 209—in 1987. Apparently, the number of killed was no less in 1986. I am not talking about those who received burns, injuries.... You see, this is a national disaster!...
- M. Ushakov: It seems to me that the second point in Article 29 is excessively favorable to the manufacturers of products—for example, the automobile. Everyone agrees that this is a technically complicated product. For example, the emergency signaling button in my car flew off, it had broken.... Is this a basis for replacing the automobile?
- P. Sheleshch: They quoted to us an example from the Czechoslovak code. If some item or part is subject to being replaced....
- M. Ushakov: ... A button, undoubtedly, is subject to being replaced. You see, however, the engine is also part of the vehicle. The undercarriage is part of it. And the body.... They also can be replaced. But how? Incidentally, it is written in the article that warranty repairs are carried out over the course of 20 days, but who determines and how whether a product needs repair (warranty) or replacement of defective parts—or needs to be completely replaced.

A different wording for the second point in Article 29 is required.

A. Kannabikh: We, of course, agree. However, I would like to refer to court practices when the subject concerns technically complicated products, in particular, automobiles. I myself have been present several times at these court proceedings. The question is posed there as follows: An automobile can be replaced only under one condition—if it is impossible to replace the broken item on it. Are there items which it is impossible to replace? They answered me that there are no items like that. What is this—a blind alley?

Here is a somewhat different example. I was present in one of Moscow's rayon courts where a suit against the Temp Association was being heard. The purchaser of a television had found out that 10 percent of the screen area did not correspond to the correct color rendition. They had invited the trade inspectorate and specialist. They asked them: Is this a defect? Yes, they said, it is a defect. However, it was ascertained in the court that it

completely corresponded ... to the specifications compiled by the producing plant. Moreover, a distortion in color rendition is permissible on 15 percent of the screen area! Again, a blind alley?

- L. Bochin: I want to raise the following question: Who will answer and when to the consumers for the warranty, for that same warranty repair? No one is now responsible for this. We, the customers, pay for warranty repairs. You see, the payment for this "service" is included in the cost of each technically complicated product. However, not all break down within the warranty period but, let us assume, a third do; the rest? Everything goes as profit to the producer. Put briefly, the upkeep of warranty workshops and of all warranty work has been placed on the consumer's shoulders. I think that it is necessary to restrict deductions for warranty repairs to, for example, five percent-and no higher. Then the producing enterprise will be forced to manufacture only quality products. Otherwise, they will have to pay for the warranty work out of their own pockets.
- A. Kannabik: The way out of the situation that has been created with this draft law could be the following: It is necessary to adopt separately a law on product quality, which has a section about protecting consumer rights in the area of quality—and nothing more because the other aspects of these rights are not provided for in the draft.
- A. Kvedaravichyus: I will express the opinion of the Lithuanian association of consumers. The draft law states what is within the competency of the center and what remains to the union republics, that is, again there is subordination: We have a right to resolve some things, and others solve some things for us. As a result, it turns out that a union law will be passed and then, we will pass a republic one....

Retort: You see, however, we are talking about a USSR law ....

A. Kvedaravichyus: It is written in the draft that questions, which are not related to the competency of the USSR, are under the jurisdiction of the union republic. Who will tell us what these questions are? This is not in the draft. We will develop our own law, a republic one, because we have our own specific character and our own opinion about solving certain problems. Of course, it will basically not contradict the USSR law—this is clear.

I will now speak about something else. It seems, that all the propositions in other norm documents that are in effect have been assembled in the draft law. For example, the impressive volume of Trade Rules. Everything is mentioned there in detail and specifically—all rights and duties. However, we cannot force trade to fulfill them or weigh them even if the main points in these rules are up for a general review. They, for the life of you, are not getting to this.

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L. Bochin: I want to continue your thought. The law can only be in effect under certain economic conditions and with a certain level of product quality. Do we have these conditions today? It does not seem so to me. That is why the possibility of implementing this law causes me serious doubt. The Law on a State Enterprise says that the producer is obliged to satisfy the needs and demands of the population for produced products. However, our demands and needs are not being satisfied; this means that the law is being violated. However, I do not recall a single court proceeding on this matter.

The following trend is being observed lately: Many enterprises have shifted their cost accounting problems to the consumers' shoulders. They are literally trying to deceive us in each handy case. Even the products, which we called basic necessity goods even quite recently, have fallen under contract prices. No one intends to lower the prices for them!

I have the following suggestion. In Article 25 of the draft law where the subject concerns economic and material responsibility for the quality of products, write: The profit, which an enterprise receives from poor quality products, is subject to being removed as state income for the budget. Also: if a consumer society brings poor quality products to light, part of the deductions from this income should go to benefit that society. In my opinion, this is logical.

The board of the Moscow consumer union has empowered us to state that it is necessary to develop and adopt a special law on the consumer rights which are widely known in the world practices of the consumer movement.

P. Sheleshch: No one is objecting to revising and improving the draft. However, the comrades, who worked on this document, boil everything down to the fact that we have provided concrete suggestions for improving the wording. Nothing more.... In my opinion, this is an incorrect approach.

Another substantial item. They have given us too little time to understand the draft and to discuss it. It is necessary to lengthen this time. Haste can only hurt. It is impossible to ignore the fact that the draft does not say a single word about who will specifically guarantee the rights of the consumers and how. There should either be a reference to some other laws or we should speak about developing some additional legislative act on this question.

The draft law mentions the consumer movement's publishing agencies. However, the discussion only concerns the publication of bulletins. Why? Maybe they want to publish a newspaper in Lithuania; a magazine—in Belorussia; and a bulletin—in Leningrad....

Retort: This testifies to the regulation of our rights. Other publications are not prohibited, but as soon as "bulletin" is written, only this will be permitted to be published....

A. Kvedaravichyus: There is another wish. The Supreme Soviet's new composition will examine this law. Let the people's deputies treat this matter in a business-like and conscientious manner. Let them examine it for a month or two, if necessary.... In the end, deputies are also consumers and express the interest of consumers.

The "round table" discussion of the draft Law on Product Quality and the Protection of Consumer Rights demonstrated complete unanimity that a law guaranteeing a Soviet person's right to acquire and use products and goods of irreproachable quality, is necessary. The opinions of the participants in the discussion diverged only on how high a level of "quality and reliability" should be guaranteed in the draft law. In our opinion, the concrete comments and proposals, expressed by the "round table" participants, will contribute to strengthening this guarantee.

### HOUSING, PERSONAL SERVICES

## Figures Show Poor Housing Program Results

### **Inadequate Growth Rates**

18270102 Moscow EKONOMICHESKAYA GAZETA in Russian No 19, May 89 p 9

[Article by A. Kovalev: "The Fate of the Program Is in Our Hands"]

[Text] A little more than 3 years have passed since the 27th CPSU Congress formulated the concept of a strong social policy. And now it is becoming more and more obvious that its dynamic implementation depends upon at least two primary conditions: the level of the social reorientation of the economy and the strengthening of the human factor in the management and organization of production.

It seems that during these years the center has done all that it could in the difficult transitional stage in the elimination of the inertia of stagnation and in the overcoming of the critical decline in the development of the economy. The priorities of social policy and their economic basis were defined. This policy is formed on the basis of the rates of growth of national income established in the plan, a balanced level of development of national economic complexes and the strictest practices for the saving of resources.

What can one now write to the credit of perestroyka? Above all the realization of the course of increasing the share of the consumption fund in national income. This is a natural factor in the social reorientation of the economy. But let us note that despite the substantial increase in the rates of growth of national income last

year's plan for the rates of its increase was fulfilled by only two-thirds of the set target and its average annual rate of increase for the last 3 years remained at the level of the analogous indicator for the years 1981-1985, amounting to 3.6 percent.

The conclusion is simple: the fulfillment of the plan for the increase in national income established on behalf of raising the standard of living could increase the importance of the share of the consumption fund. With the appropriate initiative by each labor collective, this increase would not have the negative result of the rates of increase in wages exceeding the rates of increase in labor productivity, which created pressure in the domestic commodity market, but would result in real social benefits, for which we are experiencing an unsatisfied demand. This can be related, in particular, to the resolution of the housing problem and to the development of medical care, which is the subject of a number of articles in this issue of the weekly.

What are the reasons for the failures? The economic reform is not yet working at full strength, in its full scope, and the national economy has not yet gained the necessary acceleration. This generalized formula that appeared in the report of the USSR State Committee for Statistics is clearly fair but essentially does not reveal anything. The essence is that the central economic authorities, having delegated the rights to manage key elements of the new economic mechanism to the localities, did not get them to realize the strict interdependence of the factors of economic growth and the satisfaction of the needs of the population. The euphoria of local rights prevailed over the feeling of responsibility for failing to fulfill individual economic indicators.

Behind the overall figures on the scope of housing construction and the reports on the fulfillment of the annual plan for the introduction of housing we see a tendency to realize the party's social policy and the efforts of its leading body aimed at resolving one of the most acute problems. But these general figures conceal the lack of initiative and at times the direct inaction of a large number of local soviet and economic managers who are supposed, by utilizing their rights, to show concern about strengthening and developing the housing construction complex.

Last year, through all sources of financing, 2.2 million apartments were constructed with a total area of 129.5 million square meters. Of the 13.6 million families and single persons registered on 1 January 1988, 11 million had housewarmings. Let the reader forgive us for such a "statistic"! It seems to have been invented on purpose by our statistical agency so that no one will understand: in the first place, how many "families and single persons" are included in the number of 11 million people who improved their living conditions? And secondly, try with such a statistic to figure out how much housing must be constructed in the current and subsequent years if at the end of 1988 just as many people—almost 14 million

(again a "family" count)—were registered for an improvement of their living conditions in cities and communities of the urban type as at the start of the year.

If one considers that the total number of persons in line—families and single persons—practically did not change during all of 1988, then it is reasonable to ask who is responsible for the specific 5-year and annual elaborations of the program for housing construction that must resolve the task of providing each family with a separate apartment by the year 2000.

But this is not all there is to the matter. As was said above, we fulfilled last year's plan for the construction of housing and gave new settlers 3.8 million square meters more housing space than the average for the first 2 years of the five-year plan. Oh this "average temperature" in the hospital! How convenient it is for hiding anomalies! And a simple truth is being hidden here: less housing was built in 1988 than in the previous year. And one probably does not have to look far for the reason. Let us venture to suggest that last year was a year of "survival" for the system of ministries. The ministries lost the contacts with subordinate enterprises needed in perestroyka and the enterprises, in turn, were not able to make effective use of the right granted to them to utilize earned money and in many cases lost their social orientation.

The necessity of redistributing financial, raw-material and manpower resources from construction for production to contruction for purposes other than production and of activating the existing industrial potential more fully and with greater national economic effect in the interests of social development was pointed out repeatedly. The logic of the new economic thinking is being assimilated with difficulty. And therefore, in the final analysis, we are losing in the increase of national income and in the standard of living, the improvement of which is essentially in our hands. It is not difficult to prove this conclusion.

More than 1 billion rubles in capital investments were made for the building of the Cheboksary Plant for Industrial Tractors. The capacities introduced in the years 1982 through 1986 were utilized last year at only two-thirds of the rated level. They are only 80 percent manned with personnel. And at the end of last year, approximately half of the workers at the plant were registered to obtain housing.

A number of enterprises in Tomsk have not been fully staffed with personnel and therefore have not reached rated capacities. The Tomsk Petrochemical Combine went into operation in the 11th Five-Year Plan. The capacities introduced there for the production of carbamide resins, polypropylene, methanol and industrial formaldehyde have not yet been used at the rated level. Their staffing with personnel amounted to 47 to 80 percent last year. One-third of the workers are in line for housing.

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Last year, the USSR Ministry of the Petroleum Industry, USSR Ministry of Mineral Fertilizer Production, USSR Ministry of the Communications Equipment Industry, USSR Ministry of the Electronics Indusry and a number of other ministries and departments did not cope with the plan for putting dwelling houses to use through centralized capital investments and the funds of enterprises and organizations. Especially the republic and local authorities must be taken to task, of course, for not fulfilling the plans for housing construction. Among those lagging behind were the Uzbek SSR, Azerbaijan SSR, Latvian SSR, Kirghiz SSR, Tajik SSR and Estonian SSR.

It is not without reason that one of the reasons for the unsatisfactory fulfillment of the plans for housing construction and its low quality is considered to be the "special" relation of construction organizations to it. For many of them, unfortunately, it has not yet become a priority and is being done under the residual principle with a great lagging behind the construction of facilities in the production sphere.

Precisely for these reasons, as the USSR National Control Committee of the noted, the organizations of the USSR Ministry of Construction in the Southern Regions failed to assimilate 86 million rubles of capital investments in 1988 and the population did not receive more than 5,000 apartments planned for introduction. The territorial construction association "Astrakhanstroy" under the USSR Ministry of Construction in the Southern Regions fulfilled only 61 percent of the plan for the construction of housing in 1988. Taking advantage of the lack of control and permissiveness of the local soviet authorities, many houses are being turned over with a poor quality of work and with unfinished work. For this reason alone, more than 58,000 square meters of housing have been excluded from the association's report for last year. The association's plants for large-panel housing construction are 65 percent loaded. In the years 1986-1988, 9 enterprises in the construction industry and a plant for the production of 60 million bricks a year were not put into operation.

Who is responsible for this? The managers of "Astrakhanstroy," of course. And also the local soviet and economic authorities. Precisely this kind of inaction discredits the program aims of the party and, like it or not, we are being pushed to the methods of management from the center that involve administrative pressure.

The preelection appeal of the CPSU Central Committee to the party and Soviet people passed at the Central Committee Plenum on 10 January 1989 affirmed the unshakability of the party's social policy. The Central Committee assured that it will do everything possible to implement the program for increasing the well-being of the Soviet people on the basis of the qualitative renewal and improvement of the national economy.

It is planned by the end of the next five-year plan to increase the number of housewarmings by 50 percent and to increase the number of new apartments to 3 million. A Law on Pensions is being prepared that provides for a noticeable increase in their size and for an improvement of the entire pension system. The party made major decisions on a fundamental improvement of medical services for the population and a number of other measures of importance for the development of the society were worked out.

Clearly, however, not everyone everywhere has grasped the truth that an efficient economy is the foundation of a strong social policy. Its efficiency is established through the efforts of each labor collective and at each workplace.

"All party plans are subordinate to the interests of the people. Their fulfillment determines how life will be tomorrow and what the future will bring. And all of this is in the hands of the people themselves. Our labor, mastery, social action and public position are the most important guarantee of success," states the preelection appeal of the CPSU Central Committee. It is essential for all of us to realize the significance of this conclusion. In working for perestroyka, each of us is working for himself, for the welfare of his family and for the strengthening of the economic and social power of our homeland.

### **Statistics Presented**

18270102 Moscow EKONOMICHESKAYA GAZETA in Russian No 19, May 89 p 11

[Article by G. Zholudev, head of the directorate for statistics on capital construction of the USSR State Committee for Statistics, under the "Economic Review" rubric: "In Line for Housing"]

[Text] How is the task of providing Soviet citizens with well-ordered housing—as separate apartment or individual house—being resolved?

In the current five-year plan, there has been a substantial acceleration of the pace of putting housing into use and the resolution of the housing problem occupies one of the central positions in the social policy of the party. During the years of perestroyka, significant resources have been put into these objectives and additional sources of funds and new forms of organizing construction have been found.

Enterprises and organizations have now been given broad possibilities in the utilization of their own means for the construction of housing. Last year many ministries introduced most of the housing through this source of financing. More than 70 percent of the housing introduced through state capital investments is due to the share of dwelling houses built through the funds of enterprises under the USSR Ministry of Chemical and Petroleum Machine Building, the USSR Ministry of

Instrument Making, Automation Equipment, and Control Systems, the USSR Ministry of Ferrous Metallurgy and the USSR Ministry of Railways.

The average annual introduction of housing in the years 1986-1989 was 126.8 million square meters of total area, which is 15 percent more than in the 11th Five-Year Plan. On the average, 7.7 apartments per 1,000 inhabitants were turned over each year.

But the scope and pace of construction of housing are still unsatisfactory. There was no fundamental change in the construction of housing and in 1988 the introduction of housing into use through state capital investments even declined somewhat in comparison with 1987. To a considerable extent, the reason is that the successes achieved in the preceding 2 years dimished the attention paid to the construction of housing by ministries and departments, ispolkoms of local soviets of people's deputies and construction organizations.

Interruptions in the supplying of construction projects with building structures and materials, sanitary engineering equipment, and finishing and woodworking products are restraining the development of housing construction. At the same time, about 80 percent of the capacities for the production of panels and other structures for large-panel house building and bricks are being used, 70 percent of those for window units, 75 percent for door units. Not once in the first 3 years of the five-year plan was the annual plan fulfilled for the production of assembled window and door units (in 1988, it was 94 percent) or for parquet flooring (93 percent).

An abrupt increase in the scope of the introduction of well-ordered housing is being hindered by the shortage of sanitary engineering equipment, in particular bathtubs. The annual plans for their production were 95 to 98 percent fulfilled in the years 1986-1988. In the first 3 years of the five-year plan, 267,000 fewer bathtubs were produced than planned. Their production could ensure the supplemental introduction of more than 10 million square meters of total housing space.

The construction of rural housing is attaining an extremely great significance in the realization of the current agrarian policy. How do things stand here? In the first 3 years, the kolkhozes and sovkhozes put into use 58.6 million square meters of total space of dwelling houses. This is 15 percent of the housing introduced in the entire country. On an annual average, 8 percent more dwelling houses were constructed in comparison with the last five-year plan. And if one takes the sum of annual plans, kolkhozes overfulfilled the target for putting dwelling houses into operation by 15 percent and sovkhozes overfulfilled the target by 5 percent. At the same time, there was a substantial lag behind the plan in the kolkhozes of Georgian SSR (the level of fulfillment

was 44 percent) and Turkmen SSR (78) and in the sovkhozes of Georgian SSR (81), Azerbaijan SSR (84) and Moldavian SSR (88 percent).

The comprehensive development of individual housing construction is helping to resolve the housing problem. In the years 1986-1988, individual builders constructed 57.7 million square meters of total area of dwelling houses and the average annual introduction increased by 20 percent in comparison with the 11th Five-Year Plan. The relative share of dwelling houses built by the population in the total housing introduced was 15.2 percent in the years 1986-1988 compared with 14.5 percent in the years 1981-1985. Still, in the first 3 years of the five-year plan, the plan for individual housing construction was fulfilled only in 1988. Difficulties in the receipt of lumber and building materials are a hindrance. In 1988, the plan was only 86 percent fulfilled for the delivery of timber under market allocations, 64 percent for sawed lumber, 83 percent for prefabricated wood houses, 87 percent for sets of wooden workpieces for houses with walls made of local building materials, 92 percent for cement, and 95 percent for structural glass. The target for the sale of local building materials to the population was only 55 percent fulfilled in 1988. Here as well, of course, much depends upon the initiative and resolute actions of local soviets and ministries.

The average annual introduction of housing through the means of housing construction cooperatives increased by 31 percent in the years 1986-1988. Housing construction cooperatives account for 6.8 percent of the housing built and their contribution to the realization of the construction program could be significantly greater. The local soviets received the right to transfer houses started by a construction organization and built through state capital investments to housing construction cooperatives in the established order. But these possibilities are being used quite inadequately.

The significance of housing construction cooperatives is not only in the fact that they are helping to improve housing conditions. They also divert to themselves a significant part of the solvent demand of the population. The members of such cooperatives annually use more than a billion rubles of their personal means just for the initial payment and to pay off loans. According to a survey of family budgets, 700,000 families wanting to join housing construction cooperatives had all or more than half the necessary money savings for this purpose. And again building structures and materials are needed. In 1988, the targets for the introduction of housing were fulfilled for all sources of financing except construction by housing cooperatives.

We are still not satisfied with the time and quality of the building of dwelling houses. The average time to erect them through state capital investments has declined somewhat in recent years but it exceeds the standard by 20 percent. Here much depends upon the organization of construction production. Unfortunately, the method of flow line production is not being used everywhere by any means.

The lengthiness of construction and the unevenness of the introduction of prefabricated houses has a very negative effect on the quality of housing. No more than 15 percent of the planned volume of it is introduced in the first quarter, whereas the largest part of it is introduced at the end of the year. Hence the last-minute rush, crash programs and unfinished work, from which the new settlers suffer so much.

In the years 1986-1988, 6.6 million new apartments were put into use and 1.2 million of them were in cooperative and individual dwelling houses. How many rooms and how much space do they have? One-room apartments make up 20 percent of their number, two and three-room apartments each account for 37 percent, and those with four or more rooms 6 percent. The average size of our apartments is 58 square meters of total area.

The country's available housing now amounts to 4.4 billion square meters of total area. On the average, there are 15.5 square meters of total area per inhabitant compared with 14.6 square meters in 1985. As we see, our provision with housing is improving. More than 85 percent of urban families living in state or public housing or in houses of housing construction cooperatives already have separate apartments.

Millions of people are improving their housing conditions every year. They include those who obtained or expanded their living space in previously built houses (10.5 million people in 1986, 11.5 million in 1987 and 11.2 million in 1988) but the housing question remains quite acute. At the beginning of 1989, about 14 million families were registered for improvement of their housing conditions in cities and urban-type settlements. Thus, it is necessary to increase significantly the volumes of housing construction so as to provide everyone with a separate apartment or house by the year 2000. This is the task not only of the state but of all enterprises and organizations that now have the necessary means.

Total Space of Dwelling Houses Put into Use Through All Sources of Financing in the Years 1986-1988 (thousands of square meters; data from USSR State Committee for Statistics)

	.` 1	986	1987	1988	1986-1988	1986-1988 as a percent of 1981-1985 (annual average)
USSR	11	9,806	131,514	129,093	380,413	115
RSFSR	6	6,174	72,845	70,513	209,532	113
Ukrainian SSR	2	0,441	21,257	20,554	62,252	112
Belorussian SSR		5,396	5,878	5,662	16,936	119
Uzbek SSR		6,345	7,051	7,884	21,280	120
Kazakh SSR		6,791	8,323	8,771	23,885	126
Georgian SSR		1,696	1,778	1,771	5,245	102
Azerbaijan SSR		2,104	2,849	2,469	7,422	156
Lithuanian SSR		1,990	2,013	2,017	6,020	111
Moldavian SSR		1,803	2,111	1,816	5,730	121
Latvian SSR		1,266	1,354	1,140	3,760	112
Kirghiz SSR		1,198	1,216	1,397	3,811	122
Tajik SSR		1,203	1,423	1,555	4,181	130
Armenian SSR		1,290	1,142	1,068	3,500	108
Turkman SSR		1,180	1,308	1,477	3,965	131
Estonian SSR		815	812	672	2,299	98

### PERSONAL INCOME, SAVINGS

Income Tax Draft Law Insufficiently Radical 18280127 Moscow SOTSIALISTICHESKAYA INDUSTRIYA in Russian 30 Apr 89 p 1

[Article by G. Faktor, doctor of economic sciences and leading scientific associate in the USSR Academy of Sciences World Economics and International Relations Institute: "Taxes: A Repetition of What Has Elapsed"]

[Text] When reading the draft of the USSR Law "On Changing the Procedure for and the Amounts of the

Population's Taxes," I could not keep back a feeling of bitterness and disappointment. How many times have Ministry of Finances representatives tried to gain a victory over the competency and common sense of specialists, again and again displaying departmental ambitions instead of truly economic thinking and a responsible approach to the country's seriously sick financial system?!

A group of USSR Academy of Sciences World Economics and International Relations Institute associates—and I was among them—participated in preparing the mentioned bill during the early stages of its development.

What was our disappointment when we became familiar with its published text! Almost nothing of our proposals and the wise recommendations from other members of the working group (from the AUCCTU, State Committee for Labor and Social Problems, etc) remained in the final version.

What has the Ministry of Finances brought to us? A curtailed and indeterminate document and, moreover, an incorrectly titled one since its subject in no way concerns the taxing of citizens or even income taxation but only basic income taxes. The present procedure of separately taxing income from basic work, from the holding of more than one office and from honorariums for works of art, prizes, etc., is preserved practically untouched. The mandatory spacing out of annual wages by month and repeated recalculations are preserved....

We had proposed the establishment of a single income tax for all citizens that would be levied on their total annual income regardless of its source. In this regard, it was suggested that the collateral income tax, which we modestly call a tax on bachelors, single persons and citizens with small families, be repealed. The single income tax should be calculated using sufficiently "gently sloping" progressive graduated scale rates. The highest rate was intended for annual incomes over 60,000 rubles (i.e., 5,000 rubles a month).

A simpler method for calculating taxes was suggested in the preliminary version—at the end of the year based on a declaration submitted by the tax payer. Those workers, who have only one source of income from working in state enterprises, were to be freed from submitting a declaration. The procedure for collecting taxes from their wages was to remain as before—monthly through the bookkeeping department.

Why was it necessary to pile in the bill unclear articles about extra tax charges for different types of incomes if the old procedure is essentially being retained? Yes, and why add to this the extremely questionable Articles 7,8,9 and 12 on taxing prizes, gifts, and payments for rank?

How should one evaluate the scandalous fact of dual taxation on the wages of cooperative members? Let us recall that, in accordance with the 23 February USSR Supreme Soviet Presidium ukase, the entire wage fund of cooperative members is covered by a tax as part of the cooperative's income. In the event that the new bill goes into effect, these sums will now be repeatedly subjected to taxes in the form of the individual cooperative member's wages. Against the background of such a "witty" find, even such "pretentious novelties" as the levying of income taxes on material assistance and awards for discoveries and inventions, pales. Incidentally, it is not understood why scientists and inventors, who have received state and certain other prizes, are freed of taxes but everyone else must pay this tax.

Now is the time to say that one of the weakest spots in the draft is the question of providing tax preferences. In my view, the non-taxed minimum income is too low—all told, 80 rubles a month instead of the present 70. We in the working group suggested setting it at a level of 100-120 rubles.

Considering foreign experience, we suggested introducing a number of tax preferences for children and other dependents. One of the versions of the draft, for example, provided a reduction in the tax base for each child. Article 10, true, provides a reduction in the total tax (however, not from taxable income!) for citizens who have more than four dependents and, moreover, only at the place of their main work. Why should families with three and even two children be deprived of the right to a tax reduction? Is it easier for them to live and work than for Lenin Prize winners, colonels and generals (for some reason, the bill is silent about preferences for the latter; evidently, they are being maintained)?

What then was the result of the preparatory work? I will answer directly: The central departments did not make up their minds to raise their hands for a serious radical reform of our financial system. They were not able to achieve—as they do in any country that is experiencing an economic crisis—a sharp and severalfold reduction in centralized budgetary investments for expensive capital construction programs in the articles of various ministries of land reclamation and water resources, nuclear energy ministries and similar ones—not to mention investments for defense and space programs. They prefer to "fish out" two-three billion rubles through taxes instead of receiving 50-100 billion!

Yes, what does this say about the budget!? Last year, our group sent—and not only to the Ministry of Finances but also to the USSR Council of Ministers—proposals for an integrated and comprehensive tax reform that was based on the close mutual coordination of the population's income taxes with the taxes on enterprises (it also provided for transforming the turnover tax into a value added tax and the modernization of customs collections). The implementation of this reform would have increased the state budget's income by quite a bit more than the latest normative acts or their drafts are providing. As always, however, the development of the reform was farmed out to the Ministry of Finances and underwent a primitive method there: Some subdepartments worked on enterprise taxes; others—on citizen taxes, etc. Gosplan treated tax reform in a similar way also.

Of course, a radical restructuring of the work of financial agencies is also required for a radical tax reform. It is necessary to establish tax inspectorates, to train personnel for them—and not in a small number, to teach the population the rules for filling out tax declarations, to change the procedure and account forms, etc., etc. However, for whom is all this necessary? We have traveled along a path that has been well trod for a long time by a

conservative bureaucracy: Let everything drop, emasculate the reform, confuse the public.... I doubt that it will be a success this time: I would hope that the new Supreme Soviet, being guided by nondepartmental experts, will be able to bring the bill being discussed to a condition where it completely satisfies the goals and tasks of restructuring our financial services and normalizing the entire economy.

### Poverty Existence Described, Fund Recommended

#### Letter, Comment

18280111 Moscow TRUD in Russian 5 Apr 89 p 2

[Letter to the editor from A. Karaban, village of Orlovka, Rostov Oblast: "A Human Being's Cry: Help Those Who Are Like Us"]

[Text] I can hardly wait for the new pension law—it is my last hope. Because now my family and I are at the point of being doomed to a hungry existence and becoming unneeded members of society. I have been an invalid since childhood—the legs do not respond, and I cannot even move with the aid of crutches in slush and on slippery ice. The wife is seriously ill and, understandably, she cannot work. But she does not have the official status of an invalid—this requires undergoing periodic examination and treatment in a mental hospital, but she does not want to end up there (she knows what the conditions and procedures are there). We have an 8year-old daughter who is in school. My pension for the three of us is only 65 rubles 50 kopeks. City invalids are paid an extra sum for dependents, but kolkhoz invalids are not. It is true that we get free medicine for the wife and that my medicine is half price and, moreover, I can ride on public transport free of charge within the rayon boundaries. But these are crumbs. When my health was better, I worked in a kolkhoz, and the local trade union committee alloted me at least 30 rubles annually for treatment and other small expenses. Now there is no help. At least the raysobes [rayon social security department] gave 50 rubles last year free of charge.

It is thought that life in a village is cheaper. Nothing of the kind! Our family cannot conduct a "natural economy." We grow vegetables only. And for the rest we have to pay even more than city dwellers pay. Heating-150 rubles a season, and the little gas tanks that city dwellers buy for 2 rubles cost us 4 rubles. There are practically no products in the store—the opinion prevails that villagers should have everything of their own. Two years ago the village soviet displayed generosity. It gave me the right on a par with war veterans to get butter in the village store. But I was able to take advantage of this only once—afterwards the trade organizations announced that there are no funds. Products have to be bought at the market: butter is 8 rubles per kilogram, milk—50 kopeks per liter, meat-4 rubles... In the summer, true, it is easier: sometimes I get out to the rayon center, and I "graze" in the little store that serves city war veterans and invalids. If anyone does not want sausage, cheese, or something else, I beg them to take these products and resell them to me. I myself tried to "register" with this store—they say it is not allowed for villagers, "you are not one of us."

I would live in the city—in the summer I would be able to earn additional money as a bootblack, a kiosk minder, and a typist. But in our remote area, there is no work for those like me, the helpless. What is one to do? I am not worried about myself—I would tighten my belt another notch and endure it, but, you see, the daughter is growing up! Incidentally, she is an outstanding student—she is our only joy. But she needs clothes and shoes in order to have something to wear to school, to play with those of her age in the street, and she needs good nourishment... I feel that I do not have the wherewithal to provide for her. What is one to do?

They say that the state will take care of the sick, the infirm, and those citizens who cannot work. Of course, I can be put into a home for invalids and the aged, the wife can be put into a mental hospital, and the daughter, into a children's home. But this is immoral! Why should not a part of the money, which in this case the state would spend on our support, be paid to us—and to those like us? This will be more economical for the state and more humane with respect to us. Alas, this question is not even raised. . . I heard that various voluntary funds are being established now to provide help for such families as ours. But I do not know where to turn to for help and what documents to submit, and, speaking honestly, I am embarrassed to ask anything of any other organizations besides the social security department.

I am trying to be an optimist, but sometimes I see life in a dark light...

#### From the editor:

Quite a few letters like this are mailed to the editorial office. Our people have reacted keenly to the pain and needs of others at all times. Unfortunately, the charitable funds that were set up in recent years almost do not relate to this category of people—invalids, pensioners, families with a lot of children, and simply those who have fallen on hard times. Let us think about this together and consult each other on how to help those to whom the state does not yet guarantee social protection. Perhaps it would be worthwhile to establish a special fund for those who live "below the poverty line"! Maybe, help them as much as possible with money from personal incomes! Or are there other proposals! We await your comments and participation.

### **Economist's Response**

18280111 Moscow TRUD in Russian 8 Apr 89 p 2

[Article by V. Tomashkevich, prorector of the All-Union Institute for Increasing the Qualifications of Managerial Personnel and Specialists of the USSR Goskomtrud [State Committee for Labor and Social Problems], Moscow, under the rubric "Opinion": "A Fund to Help the Poor Is Needed!"]

[Text] A. Karaban's letter "Help Those Like Us," which was published in TRUD on 5 April, evoked a feeling of compassion among readers for the family of the author

and a desire to help it. Many are calling up the editorial office to confirm the address in order to send money. They are confident that the material situation of the family of the invalid from the village of Orlovka in Rostov Oblast will noticeably improve as a result of the kindness shown it and the charity of our readers. But there is a great number of families like this who live below "the poverty line." How can help be given to all of them!

Doctor of Economic Sciences V. Tomashevich also sent a money order to A. Karaban's address and brought a letter to the editorial office with his proposals for resolving the problem raised in the newspaper.

A feeling of bitterness and shame came over me when I read this letter in TRUD. A hopeless material situation has arisen for many, very many of our fellow citizens. Why are we so callous and cruel with respect to the older generation and invalids? I read this letter in front of students of our institute. There was a deathly silence, and it was embarrassing to look each other in the eyes. But a student from Dnepropetrovsk gets up. He says that in our country 70 percent of the suicides are pensioners and invalids. Many write posthumous letters, talking about a hopeless material situation, social humiliation, lack of protection, the futility of the present life, and a soiled past. And so they see but one out—leave this life... Let us turn to our consciences and think about what should be done.

An emergency material aid fund has to be set up immediately. The proceeds obtained from the communist subbotnik on 22 April should be transferred to oblast social security departments, cities and individual rayons to be delivered to the poor. I am confident that the people will support such a step.

Extraordinary measures are needed. At least a billion in cash must be collected in short order to help those who in the full sense of the word count each kopek and for

whom bread and cabbage are the main items of nourishment. Help is needed for those who are suffering materially, but it is also needed by many others for personal purification, when the virus of money-grubbing, accumulation of wealth, and social egoism, which frequently assume a militant character, can destroy the moral potential of our society.

I propose that each worker make a transfer to the emergency material aid fund of only 0.3 percent of his salary. Considering that the wage fund in the national economy is approximately 300 billion rubles, almost a billion rubles would come into the aid fund annually. It is possible that not everyone is capable of such a step, and that this will have to be done on a voluntary basis! Although I do not exclude the establishment of such an arrangement through legislation. Because concern for our fellow citizens is a matter for all of us, the moreso because it is unlikely that new the pension law will be adopted in the near future.

Though it is already necessary to find the means now for increasing the pensions of those who cannot make ends meet. I think that 4-5 billion rubles will be needed to raise the category of these people who are in a distressful situation. For the time being, it is not obligatory for all of those who receive 60-70 rubles but who live in families whose condition is good. I hear irritated voices: and this is now, under conditions of such an inflation? Yes, precisely now, and not a day later! Obviously, this will require a reduction in a number of social programs and cancelling increases in salaries, as an example, for us, scientific workers and teachers in higher schools. Do not get angry, colleagues, we can work together now, if only there is the desire.

I ask that my proposals be viewed as a mandate to our deputies and as an appeal to the forthcoming Congress of People's Deputies and to the future USSR Supreme Soviet. The disastrous situation of old people and invalids is our national disgrace, and we have to rid ourselves of it as fast as possible.

#### ELECTRIC POWER GENERATION

## Krasnoyarsk Defense Plant Converted to Nuclear Waste Disposal Facility

18010825 Moscow PRAVDA in Russian 26 Jun 89 p 8

[Article by TASS Correspondent Yu. Khots specially for PRAVDA, Krasnoyarsk Kray: "The Nuclear City: A Trip to a Populated Area Which Is Not on the Map"]

[Text] Silvery steel cylinders, like bodies of huge sharks, are concealed under a multimeter layer of pure spring water. We are looking into the darkening openings in them where the superhuman power is hidden.

"Former power," corrects Shop Chief V. Yershov, "Now, after work at nuclear power plants, those rods inside the cylinder are faced with a prolonged holiday. Although even today they still have enough power. If it were not for these several meters of water, we could not stand here for even a few seconds."

Having worked here for more than a decade, could he, an engineer with the highest qualifications, assume that he would meet strangers within these walls, in the sanctum of the city which is not on any maps of the Soviet Union? And he would tell us about his work in still greater detail.

With a stroke of his famous red pencil at the beginning of the 1950's, Stalin signed a decision on creating this city. The leaden clouds of the "Cold War" had thickened over the world. We had to answer strength with strength and new weaponry with newer weaponry.

They built it as was customary in those years. Thousands of people were driven together on the mountainous shores of the great Siberian river to build a radiochemical enterprise for producing plutonium for defense needs. Those condemned by the people to the camps have sunk into oblivion, but the city's reliable barrier from the whole surrounding world remained as was demanded by the specific nature of production.

Now there is a city of white rock where several tens of thousands of people live. We drove in through the entry control point. Having looked us over with a stern glance and having examined our documents, a pretty young woman in uniform said: "Welcome!"

This trip would never have occurred if a thaw in the international climate had not resulted in the fact that the great power confrontation, judging by everything, is coming to an end. Missile bodies are already being destroyed by peaceful explosions and their nuclear stuffing is being reprocessed. And now, even this Siberian enterprise has lived to the time when it is being forced to change the specific nature of its production and will be involved with what we call "conversion," a new word for our times which is a transition to peaceful purposes. What are they going to be involved with under the new conditions? There is one answer—the peaceful atom.

The road to the site where the spent nuclear fuel storage enterprise is located meanders between hills. And here we are driving up to the building in which these very elements are stored. They are delivered here only from our nation's AES's. We put on smocks and the managers offered us boots. "Thus, in any case," although the cleanliness here is perfect. We climb up several stories and enter a room which is similar to a soccer field in size. Yershov executes operations with technical terms and numbers, 10 to the minus 9 power curies per liter, the assembly's radioactivity, and the water lining...

Understanding how difficult it is to professionally answer an amateur's questions, we ask to begin from the moment the cargo arrives here. The metallic cylinders with the rods locked inside them arrive at the enterprise by rail in special rail cars. At that moment, a most terrifying thought flashes by: What if these rail cars had ended up in that terrible fire which occurred recently in Bashkiriya?

"Look at these steel containers in which the rods are kept during shipment," suggests V. Yershov. "They can withstand several times greater forces. The walls are 300 millimeters thick. Like black boxes on aircraft: They will not burn and they are unbreakable—such are the requirements for their reliability."

A super-powerful crane carefully picks up the arriving multiton container and carries it to a specially prepared spot. Here, experts unscrew 32 bolts which hermetically sealed the cover to the case. After that, the real secrecy begins. This same crane lowers the container under water where its cover is also removed. The cylinder itself is carefully extracted using special equipment. Now it must be in isolation under water armor which also protects us from radiation.

By the way, the cylinder once had a neighbor. V. Yershov dropped his glasses into the water during an inspection. They lay there for several hours until a special claw brought them to the surface—thanks to the very clean water. "And where are these glasses?" we asked the manager. Veniamin Filippovich nods toward the office: "Now, I take them off when I come out here since I do not want to assign unnecessary work to the crane operators."

"And how many more cylinders can you accept for storage here?"

"For the time being, our storage area is less than five percent full. We will finally fill it sometime toward the beginning of the next century."

"And what then, when it is 100 percent full?"

We drove through a tunnel just outside the city which led us under the Yenisey to the opposite shore. This structure is certainly the only one of its kind. Concrete almost a meter thick separates us from the rock. The bottom of the river is 50 meters above us. After a trip of several minutes, the sun greeted us once again.

"Pipes must pass through this tunnel to the radioactive waste underground storage area," says Yu. Chekmarev, chief project engineer, joining the conversation. "It is at a depth of 700 meters. It is a two-story structure. The pipes themselves pass through the first story, and buses, trucks, and light vehicles pass through the second story. Once it has emerged from the tunnel, the pipeline will stretch to the burial site. Before we selected it, we conducted a thorough investigation. What were we guided by? First of all, when we had drilled several dozen holes, it turned out that there was a formation at this depth which is located sort of inside clay strata which are hundreds of meters thick. They will not allow the radioactive solution to go outside the limits of this layer."

"That means there will not be any vertical movement. But what if the solution begins to move horizontally?"

"It will really be as if it is crawling. But this is what we ascertained. The rate of movement of water particles under the ground total approximately a meter per year. Besides that, radioactive substances will be seized by microporous rock which keeps them motionless. Let us calculate: If the underground current reaches sections of the formation near the river, it will be in approximately 15,000 to 20,000 years. By that time, all radioactive elements will have decayed and will present absolutely no danger whatsoever to the Yenisey. And we are extracting those which have a long half-life."

"But, what if something unforeseen occurs anyway and the underground radioactive river begins to move toward the Yenisey more rapidly..."

"Observation holes are located within the confines and along the site's borders. We can affect its movement if the need arises."

"Can a rupture of the pipe occur in the tunnel itself under the Yenisey?"

"While designing the facility, we stipulated such requirements for the pipes' reliability that they should not even need to be repaired throughout the site's entire 30 year operation. Moreover, the pipes are laid inside concrete troughs which are covered with stainless steel. In the event of the smallest leak of the pipe itself, the solution will remain in the troughs. Sensors located along the whole route will allow us to rapidly detect damage and eliminate it afterwards..."

Another burial method is now being developed—solidifying wastes and holding them in special storage areas for 30 to 40 years with subsequent removal to deep formations. This method has already undergone experimental

production testing. Final selection of a burial variant will be made after exhaustive analysis and on the basis of the conclusion of an independent commission.

Our amateurish questions caused bewilderment among the experts, although they frankly answered each one. But this is what we thought. This is because we do not have enough dialogues of this sort with knowledgeable people who are at the sources of various projects.

Nevertheless, the beginning of pipeline operations will be during the first years of the next century. Quite a bit of water will flow through the Yenisey by that time. After accidents at facilities with nuclear electrical power plants, people have a natural feeling of opposition toward construction of new facilities such as these. For example, how do you make a shield out of "fools" whose actions you could not calculate even with a computer? It was fourfold at Chernobyl and it did not help.

Since the time this article was prepared, events have taken an unexpected turn... On 22 June 1989, speaking on Krasnoyarsk television, V. Sergiyenko, chairman of the Krayispolkom and USSR Peoples Deputy, emphasized that "Siberians are always justified in raising the question of banning underground storage of radioactive wastes on the kray's territory. After the work of the independent commission and publication of its conclusions, the kray's residents must have the final word which requires a referendum." We should expect this. For too long, the whole truth about the nuclear city and the pipeline which comes from it has remained sealed. People need impartial and thorough information. Only information will give them the capability of arriving at the only correct conclusion.

## Improvements in Management of Electric Power System Planned

18220111 Moscow ELEKTRICHESKIYE STANTSII in Russian No 4, Apr 89 pp 2-6

[Article by engineer Yu. D. Artyukhin and A. I. Zagyanskiy, candidate of technical sciences, USSR Minenergo [Ministry of Power and Electrification] and Ekonomtekhenergo under the rubric "Improving the Economic Mechanism": "A New Plan for Managing the Electric Power System"]

[Text] The General Plan for Managing Power and Electrification in the USSR, which provides for improvement in the organizational structure of power engineering management as an integral part of the combination of measures to implement the decisions of the June (1987) Plenum of the CPSU Central Committee on radical restructuring of the economy's management, was adopted by the USSR Council of Ministers and put into effect in 1988.

Under the new conditions of economic operation, the USSR Ministry of Power and Electrification is obliged to concentrate its activity on implementation of the

ENERGY

USSR's energy program, meeting the requirements of the national economy and the public for electricity and thermal power, realizing the principles of full cost accounting in accordance with the Law of the USSR "On the State Enterprise (Association)," and consolidating centralized supervision of the Unified Power System of the USSR with the transfer to the local area of the functions of day-to-day economic management by the power systems.

The USSR Ministry of Power and Electrification is one of the largest ministries in industry as well as in construction. Its volume of commodity production is valued at 34 billion rubles, the volume of contracted work amounts to 9 billion rubles, and it includes about 5,500 enterprises and organizations. The USSR Minenergo not only engages in construction, but it has a powerful construction industry and machine building plants.

Power engineering—the bulk of the ministry—unites more than 1,600 enterprises employing over 1 million persons. The value of the production fixed capital amounts to 100 billion rubles and the earnings from the sale of its commodity output, power generation, add up to 33 billion rubles. The USSR Minenergo provides for state power engineering inspection, it monitors over 3.7 million enterprises and organizations which consume energy, and it supplies nine countries with electricity.

When the General Plan was adopted, the organizational structure of power engineering management was complicated, diversified and multilevel in nature.

The foundation of the ministry is made up of 105 power systems, 89 of which operate at the same time as part of the USSR YeES [Unified Power System]. The power systems include 480 electric power stations, 615 power network enterprises, and 90 heating system enterprises.

The scale of power engineering determines the complexity of its organizational structure.

The average management component includes three republic ministries, 11 production main administrations of union republics, two VPO's [All-Union industrial associations], and six operations main administrations in the central apparatus; in addition, there are 80 regional power administrations to which the power enterprises are subordinate.

The management utilized in power engineering has been organized in accordance with either a four-level (78 percent) or a three-level (22 percent) management system.

The organizational structure of power engineering management has taken shape on the basis of the strict conditions in which it functions with respect to the consumers and the resultant necessity of centralized

day-to-day management of the production and distribution of power under conditions of a fuel shortage and the lack of a necessary reserve of capacities at power stations.

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At the same time, excessive centralization of the management of many production functions has been typical for the structure which has developed. Repair and adjustment operations, project planning, scientific developments, and the construction of new power projects and the renovation of ones in operation have been centralized in the sector.

The centralized management systems began to impede the sector's work, since the majority of current problems had to be resolved through the ministry apparatus, which turned out to be overloaded with the problems of the moment to the detriment of strategic sectorial problems. For example, decisions on the repair of about 700 turbines and boilers at hundreds of power stations were contained in the annual sectorial order on the organization of a repair campaign.

The ministry staff was not left with sufficient time to resolve the important sectorial problems, which led to negative consequences (for example, in providing enterprises with fuel, motor vehicles, and special machinery for power networks).

The basic task of restructuring stipulated by the General Plan is to put an end to excessive management centralization.

The essence of restructuring is to establish strong organizational structures in the country's regions which are capable of independently resolving the problems of operation, maintenance, technical reequipment, the introduction of new technology, power engineering development, and provision of a steady supply of power for consumers.

By developing the centralized management of the USSR Unified Power System (construction of major power stations, superhigh-tension VL's [aerial transmission lines], and systems automation) and by reinforcing dispatching discipline in all components, the General Plan provides for decentralization of management by transferring the day-to-day economic functions to the local areas in every possible way.

Two versions of the plan for management of the sector have been examined.

The first one makes 70 power systems in the territory of the RSFSR directly subordinate to the ministry.

This version would maintain the centralization in effect and the shortcomings associated with it and would not make it possible to relieve the central staff of the responsibility of resolving current day-to-day production problems. Putting all the power systems of the RSFSR and union republics (except the Ukraine and Kazakhstan) with the functional subunits of the ministry while retaining the construction "wing" of the ministry and reducing the central staff would make the sector difficult to manage, especially in the transition period before the economic mechanism has been perfected.

The second version establishes major cost accounting territorial power associations in a zone of united power systems (OES's).

This version, adopted by the General Plan, promotes decentralization and the transfer of day-to-day economic functions to the regions.

Eight territorial power associations have been established in the territory of the RSFSR (the Central and

Northwest, in Moscow; the Southern, in Pyatigorsk; the Volga, in Kuybyshev; the Urals, in Sverdlovsk; the West Siberian, in Surgut; the Siberian, in Krasnoyarsk; and the Eastern, in Khabarovsk).

At the same time, six production main administrations in the central apparatus and the VPO Soyuzzapsibenergo are being abolished.

In the territory of the Belorussian SSR, the Belglavenergo has been abolished, the Belorussian TEO [territorial power association] has been established, and the power stations which were subordinate to the Belglavenergo have been transferred to the oblast power systems.

Territory of Power Supply, Subsectors	Number of Management Levels	System	
RSFSR	4	USSR Minenergo - Power Systems Operation Main Administration, VPO "Soyuzzapsibenergo" - REU [regional power administration] - enterprise	
Belorussian SSR	4	USSR Minenergo - Belglavenergo - REU -enterprise	
	3	USSR Minenergo - Belglavenergo - enterprise	
Ukrainian SSR	4	USSR Minenergo - UkSSR Minenergo - PEO [possibly: power engineering production association] - enterprise	
Kazakh SSR	4	USSR Minenergo - KaSSR Minenergo - REU -enter- prise	
Ukrainian SSR, Kazakh SSR	3	USSR Minenergo - UkSSR Minenergo, KaSSR Minenergo - PEO - enterprise [sic; entire line as published]	
Uzbek SSR	3	USSR Minenergo - UzSSR Minenergo - enterprise	
Remaining union republics (10)	3	USSR Minenergo - production main administration (10) - enterprise	
Specialized repairs	4	USSR Minenergo - VPO Soyuzenergoremont -PO [production association], industrial trust - enterprise	
	3	USSR Minenergo - VPO Soyuzenergoremont -enter- prise	
Operation of power transmission lines with superhigh tension, 550 to 1,150 and 1,500 kilovolts	3	USSR Minenergo - Long-Distance Power Transmission Production Associations - enterprise	
Operation and maintenance of mobile power stations	2	USSR Minenergo - Soyuztransenergo PO	
Production and maintenance of automation facilities and systems	3	USSR Minenergo - Soyuzenergoavtomatika PO - enter- prise	
Adjustment, improvement in technology, and operation of power stations and networks	2	USSR Minenergo - Soyuztekhenergo PO	

Among the other versions examined was one to establish territorial associations (TEO's) which would include the power systems of the union republics in the Baltic, Central Asia, and the Transcaucasus, Moldavia, the Ukraine, and Kazakhstan. This version encountered objections from all the republics without exception, and it had to be rejected although it responds most fully to the technological principles of management of the Unified Power System. Retention of the Kazakh SSR and UkSSR Ministries of Power and Electrification completely ruled out this version.

Aside from the production associations for power engineering and electrification in a given region, the ODU [integrated dispatch administration]—a regional organ for day-to-day dispatching control of the operating routines of the power systems under normal and emergency conditions—is included as a structural unit in the territorial power association. In this connection, two new ODU's have been established: Belorussia and Western Siberia (in Surgut).

The appropriate ODU's have been transferred to the UkSSR Minenergo and the Kazakh SSR Minenergo

(only three ODU's remained as part of the TsDU [Central Dispatch Administration of the Integrated Power System of Socialist Countries]: for the Transcaucasus, Central Asia, and the Northwest).

The combination in the TEO of the functions of operational and administrative-economic management should ensure the economic responsibility of the ODU's for their commands to power systems and the combination of the interests of the united power systems (that is, the territorial power associations) with the interests of the individual power systems. In this respect the boundaries of the OES and the TEO coincide: the Eastern [TEO] is within the boundaries of the ODU for the East, the Siberian [TEO] is within the boundaries of the ODU for Siberia, the Urals [TEO] is within the boundaries of the ODU for the Urals, the Volga [TEO] is within the boundaries of the ODU for the Middle Volga, the Southern [TEO] is within the boundaries of the ODU for the Northern Caucasus, and the Central [TEO] is within the boundaries of the United Power System for the Center. The Northwestern Territorial Power Association has been established within the boundaries of the United Power System for the Northwest in the territory of the RSFSR, and it includes two separate power systems as well: Komienergo and Arkhenergo [Komi and Arkhangelsk].

The West Siberian TEO is being established within the boundaries of Tyumen Oblast in connection with the rapid development of power engineering in this oblast and the necessity (from the standpoint of controllability) of dividing Tyumenenergo into several production associations.

Among the 105 power systems there are large ones (Mosenergo, Sverdlovskenergo, Donbassenergo, and others) with a developed repair base, which are capable of resolving practically all routine problems independently, as well as small ones (Orelenergo, Penzaenergo, Marienergo, and others), which are not in a position to carry out the tasks of power equipment repair and adjustment and other operations independently to the full extent. For this reason, the TEO's should include intersystem repair and adjustment enterprises which perform all kinds of repair and adjustment which cannot be handled economically in each individual power system.

Inclusion in the TEO's of planning organizations and construction and installation trusts, which carry out technical reequipment and modernization of power stations, as well as trusts to build facilities in the social area, will make it possible to speed up the resolution of these problems for the region's power systems.

In order to provide for the introduction of new equipment, it is economically expedient to establish regional engineering centers in the TEO's which will provide assistance in mastering new equipment under contracts with the power associations.

A cost accounting regional base for material and technical supply can provide substantial assistance to the power associations.

The opportunity to manipulate the financial reserves of the TEO will make it possible to shift to economic methods of management in spite of the possibility of sharp changes in climatic conditions affecting individual power systems of the United Power System.

TEO's operating on the principles of full cost accounting and self-financing and with a full complement of the necessary enterprises and organizations will make it possible to perform practically all tasks of routine operation and development at the region level, which will enable the USSR Minenergo to be relieved of "routine business" and concentrate its efforts on long-range tasks to develop the sector.

The principal task of the TEO is to meet the region's needs for electricity and heat.

In order to carry out its principal task, the TEO provides for:

- —increased efficiency in the functioning of its individual production associations by minimizing production costs of the TEO as a whole on the basis of the integrated dispatch administration's work to ensure top-priority and maximum workloads with the most economical equipment at power stations and by reducing losses of electricity in its transfer;
- —the elimination of major breakdowns in the region which cannot be eliminated through the efforts of one power system;
- —the shifting of available maintenance personnel under the TEO's jurisdiction when unplanned repair work develops at individual power stations;
- —the solution of problems related to familiarization with and introduction of new equipment which are common to the region's power systems; and
- overall social development and the establishment of major social facilities which are common to the power systems.

The highest organ of the TEO is the TEO Council, which approves the decisions related to the most important matters in its work. The TEO is headed by a chief elected by the TEO Council.

The TEO may be managed as an individual body as well as the body of a leading power and electrification production association. The staffing of the TEO may be combined with the integrated dispatch administration.

The TEO performs the functions of a higher organ with respect to the associations and independent enterprises and organizations which are part of it.

With respect to its structural units, the TEO operates on the basis of the Law of the USSR "On the State Enterprise (Association)."

Thus the TEO combines both a higher organization and a production association which operates on the principles of full cost accounting and self-financing through the revenues from its activity. TEO personnel have functions that are similar to those of regional power administration personnel, but at a higher (regional) level.

Establishment of the TEO's makes it possible to shift to a two-level management system in the RSFSR and the Belorussian SSR: USSR Minenergo - TEO.

One of the important questions in the new system for management of the sector is: to whom does the Law of the USSR on the State Enterprise (Association) apply?

There are various points of view on this question. Some believe that the Law should apply to the power stations, the enterprises in the networks, and the repair enterprises. Individual power stations are entirely able to operate in conformity with the Law and conclude contracts with power consumers directly. Power stations such as this exist, especially in the Far East.

If a power station operates as part of a power system (these form the overwhelming majority), it should carry out the command of the higher dispatcher, which dictates the amount of electricity generated for each day and each hour. But this would be counter to the Law, which stipulates that annual plans are to be worked out and approved independently on the basis of planned figures.

Others believe that a central dispatch administration for power generation forms the basis for the technological administration of power engineering, and for this reason the Law should apply to the entire Unified Power System of the country and to the separate power systems.

Under these extreme conditions, the effect of the Law on a power system which is essentially a production association is the most acceptable. In the General Plan, this association is called a power and electrification production association.

This decision reflects the principle of unity between the administrative division and the economic management of power engineering, which is inseparably linked with the interests of the oblast, the kray, the ASSR, and the union republic.

In this connection, the following have been abolished in accordance with the General Plan: all regional power administrations and all power and electrification production main administrations in union republics, as well as the Moldglavenergo and the UzSSR Minenergo, whose enterprises are being shifted to republic and union subordination.

Oblast (republic) power and electrification production associations, which may have separate management personnel (these are actually former staff personnel of the regional power administrations) or which may be managed by personnel of the leading enterprise in power networks, have been established on the basis of the enterprises subordinate to the regional power administrations (including the REU in Belorussia), as well on the basis of enterprises subordinate to the republic main administrations and the UzSSR Minenergo.

Two associations—the Kalmyk and Kabardino-Balkar—have been established on the basis of the leading enterprises in the power networks without separate management personnel.

The reorganization of the republic main administrations and the UzSSR Minenergo into production associations will make it possible for 11 union republics to shift to a two-level management system: USSR Minenergo - union republic production association.

Reorganization of the regional power administrations and republic main administrations into production associations is not only juridical confirmation of the actual situation, but the transfer to labor collectives (in the person of the production association's labor collective council) of basic authority in resolving fundamental problems in the power system's activity. Despite the fact that the power stations, electric and heating networks, and other enterprises which previously were independent are acquiring the status of structural units, their influence on management of the power system is reinforced owing to participation by representatives of enterprises' labor collectives in the association's labor collective council.

Thus a transition is being made to more democratic forms of management: the TEO management personnel are accountable to the production associations, and the management personnel of the production association are accountable to enterprises in the power system.

The General Plan provides for a reduction of the number of independent enterprises in power systems almost by a factor of seven, that is, instead of 1,400 independent enterprises, there should be no more than 200 that are subordinate to the power and electrification production associations.

This decision to reduce the number of independent enterprises in power engineering, stipulated by the General Plan, practically rules out the possibility of applying the Law to power stations (except separate ones), to enterprises in power networks (except city and oblast enterprises), and to other auxiliary and support enterprises (motor transport enterprises, the Energonadzor [power engineering inspection], and so forth).

The production associations of union republics include the construction trusts which carry out electrification in the republic, and for this reason the General Plan stipulates that these trusts may include structural units (mechanized columns, SU's [construction administrations], and so forth). The number of independent trusts in a production association has not been limited, since the trusts have nothing to do with the power engineering sector.

The General Plan provides for the abolition of the VPO Soyuzenergoremont and the Soyuzenergoremtrest and the establishment of the Energoremont Scientific Production Association with a separate management staff. Enterprises in the Soyuzenergoremtrest are being subordinated directly to the NPO [scientific production association]. Management staffing is being reduced at the same time.

Some of the sections of Soyuzenergoremont enterprises are being transferred to power stations or to the power systems' repair enterprises.

Regional enterprises whose work is completed basically in the TEO area are being transferrred to the TEO, the USSR Minenergo and the KaSSR Minenergo (for example, the Mosenergoremont is being transferred to the Central TEO, the Uralenergoremont becomes part of the Urals TEO, and so forth). This decentralization of the management of repair service will increase the responsibility of operations personnel for expeditious and high-quality maintenance of power stations.

The General Plan also provides for the reorganization of the Soyuzenergoavtomatika PO into a scientific production association with reinforcement of its scientific area.

All the structural reorganizations cited will contribute to restructuring of the work of the ministry's central apparatus, which is being changed from an organ of production management into an organ for management of scientific and technical, economic, and investment policy in the sector. In this connection, the functional subunits which carry out technical and economic policy in the central organization are being strengthened.

#### **Conclusions**

- 1. The establishment of major organizational structures for the TEO's, which operate on the principles of full cost accounting and self-financing and are capable of resolving production and economic problems in their activity independently, will make it possible to relieve the ministry's central organization of day-to-day and routine matters and to concentrate the work of its subunits on scientific and technical development of the sector and improving the economic mechanism.
- 2. Abolition of the regional power administrations and the production main administrations of union republics establishes the organizational conditions for the power systems' transition to full cost accounting and self-financing in conformity with the Law of the USSR "On the State Enterprise (Association)."
- 3. A transition is under way (basically) to a two-level management system: Ministry TEO, production associations.
- 4. Introduction of the General Plan is associated with the extensive psychological and organizational restructuring because of the substantial breakdown of the management system which has developed for decades. For this reason, introduction of the General Plan will take place in stages, as the TEO's are formed.
- 5. A transition is under way to a more democrstic form of management in which the TEO and production organization staff personnel are accountable to the lower subjects of management.

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## **Labor Inventory Results at Moscow Enterprises Analyzed**

18280128 Moscow PLANOVOYE KHOZYAYSTVO in Russian No 4, Apr 89 pp 88-92

[Article by S. Ilin, sector head at the Moscow Scientific Research Institute for Economic Problems in the Complex Development of the National Economy and candidate of economic sciences: "Conclusions From Certifying Work Positions"]

[Text] One of the most important conditions for the national economy's balanced development is the achievement and maintenance of optimum ratios between the personal and material production factors. The lack of agreement in planning the reproduction of fixed capital, manpower and capital investments leads to a reduction in the effectiveness of their use and to a disparity in the number of work positions and the amount of labor resources. In this regard, labor and production discipline is worsened, personnel turnover increases, etc.

Questions regarding a balanced—with respect to labor resources-development of the national economy are also urgent ones for Moscow's industry. A CPSU Moscow City Committee plenum pointed out in 1986 that the supplying of enterprises with manpower was one of the most acute problems among the multitude of them facing Moscow. During recent years, the growth in the number of working-age youth has decreased and opportunities for attracting people engaged in housekeeping to public production have been practically completely exhausted. At the same time, a rather significant increase in the number of workers in the social, cultural, housing, consumer and transport service areas of the capital's population is required. At the present time, the shortage of labor resources is 70,000-100,000 people. According to data from a one-time survey by the Moscow City Administration for Statistics, 21 percent of the machinetool equipment in machine building ministry enterprises is idle because there is not enough personnel. All of this causes a need to save human labor.

In order to solve the problem being examined, the certification, streamlining, stock-taking, and planning of work positions, which would permit the number and quality of them that are necessary for production to be accurately determined; the effectiveness of the work to train, retrain and raise the qualifications of personnel to be raised; and the use of the main producer goods to be improved, have a great deal of importance.

The carrying out of this work has required the establishment and introduction of a regional system for certifying work positions. Working with Moscow's Scientific Research Institute for Economic Problems in the National Economy's Complex Development, the Moscow City Planning Commission has developed appropriate methodological recommendations and passed them

on to each industrial association (enterprise). The Standard Methodological Instructions for Planning, Stocktaking, Certifying, and Streamlining Work Positions in Associations (Enterprises) in the Machine Building Ministries and the Temporary Inter-Branch Recommendations for Certifying Work Positions in Industry were considered during their compilation. This permitted a single methodological approach to be guaranteed when summing up and evaluating the results of the certification in branch (enterprise, ministry, department, and farm of the Moscow Gorispolkom) and territorial (administrative rayon and the city as a whole) sections.

More than 3,000 work positions were eliminated as a result of the certification conducted in the industrial enterprises. The overall cost of the freed equipment was more than 24 million rubles. The elimination of underutilized and ineffective work positions, whose modernization was not economically advisable, permitted the number of industrial production personnel to be reduced by 0.4 percent and more than 50,000 square meters of production area to be freed. The economic effect from implementing the measures to eliminate and streamline work positions was more than 11 billion rubles.

The elimination of superfluous and obsolete equipment worth 140 million rubles is planned during the 12th Five-Year Plan. The implementation of a series of organizational, technical and social measures will permit the total number of work positions to be reduced by 1.8 percent. As a result, the requirement for manpower will be reduced by two percent and 114,000 square meters of production area will be freed. The economic effect will be about 80 million rubles. The qualitative structure of work positions will be improved. The percentage of work positions, which correspond to norm requirements, will grow by 11.2 percentage points. The number of work positions using manual labor will be reduced by 13 percent; those using heavy physical labor-by 16 percent; and the number of people engaged at these work positions—by eight and 15.7 percent, respectively.

An analysis of the progress in realizing the Special Purpose Complex Program for Increasing the Effectiveness in Using Labor Resources in Moscow's National Economy During 1986-1990 (Trud Special-Purpose Complex National Economic Program) testifies that the actual number of eliminated and streamlined work positions during 1986-1988, especially in the Moscow enterprises of the USSR Ministry of Power and Electrification. Ministry of the Chemical Industry and several others, has exceeded the corresponding program indicators. Nevertheless, the average annual number of work positions in the city's industry decreased by only 0.6 percent and the number of industrial production personnel by 1.3 percent during the five-year plan. The ratio of the absolute values of the mentioned indicators was 1:3.3. Considering the low actual coefficient for staffing work places, one can draw the conclusion that the achievement of the indicators, which are stipulated in the program, will not permit the branch's balanced

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development to be insured for labor resources. A comparative analysis of the dynamics of the coefficient for staffing work places with workers, which decreased by 0.02 points during the mentioned years, i.e., the number of unnecessary work places grew relatively, also confirms this.

The achievement of a balance between the amount of labor resources and the number of work positions directly depends on the reduction rates revealed as a result certifying unnecessary work positions. This process, however, is being carried out very slowly. According to data from a survey that was conducted in 1987, only about nine percent of the total number of work positions subject to elimination during the five-year plan were curtailed during 1986 in the Plant imeni Vladimir Ilich and 14 percent in Dinamo. The elimination of only 70 percent of these work positions is envisaged in the Moscow enterprises of the Ministry of the Machine Tool and Tool Building Industry; only 21 percent—in the enterprises of the Ministry of the Electrical Equipment Industry and the Ministry of Instrument Making, Automation Equipment, and Control Systems during the last year of the current five-year plan; and 18 percent—in those of the Ministry of Chemical and Petroleum Machine Building. The reduction of unnecessary work positions during the 12th Five-Year Plan is not generally planned for separate enterprises (the Kompressor, Glavprodmash and Transmash plants and the Moscow Silk Combine imeni Ya. M. Sverdlov).

Strict regulation of its timeframes could help accelerate the process of eliminating unnecessary work positions. It is necessary to limit them to two years (the approximate period for the planned certification of work positions). It is also advisable to examine the questions of establishing a data bank, which would consist of the qualitative and quantitative characteristics of the equipment subject to reduction, within the framework of the Moscow City Planning Commission; and also of simplifying the procedures for writing off, selling and transferring unnecessary equipment.

Sample inspections show that the number of unnecessary work positions is not being precisely determined in many of the city's industrial enterprises (to a certain degree, this has affected the level of fulfillment of the Trud Special-Purpose Complex National Economic Program targets for reducing work positions). For example, all unnecessary work positions, which the certification revealed, should be eliminated in such enterprises as Izolyator, Kompressor and Transmash during the five-year plan; however, calculations show that even after this the percentage of unnecessary work positions will be up to 10 percent when the shift system coefficient for the operation of the equipment is only raised to the average branch level.

In accordance with the General Methodological Recommendations for Developing Annual Fund Norms for the Operation of Equipment, Shift System Coefficients and

Norms for Using Production Areas, the standard shift system coefficient for the operation of equipment should be determined, as a rule, in the five-year plan as part of the branch instructions for calculating production capacities. These coefficients, however, have not been passed to all Moscow enterprises by far. The standard coefficient has been established in only two of the eight industrial enterprises investigated by Moscow's Scientific Research Institute for Economic Problems in the Complex Development of the National Economy. Even planned targets for raising the shift system coefficient for operating equipment have not been determined in individual enterprises.

When raising this coefficient in industry to two in non-continuous process production and to three in continuous process production, the socially required (in other words, standard) coefficient for staffing work positions with workers is 1.6 on the average. An analysis, which was conducted in the industrial enterprises of 18 ministries of union and republic subordination, showed that the values of this indicator approximated or were equal to the socially required level in only seven of them. In 1987, for example, the percentage of unnecessary work positions in the industrial enterprises of the Ministry of the Medical and Microbiological Industry was 12 percent; in those of the USSR Ministry of the Construction Materials Industry-17 percent; in those of the USSR State Committee for Publishing Houses, Printing Plants, and the Book Trade—20 percent; etc. In a number of ministries and departments (the USSR State Committee for Publishing Houses, Printing Plants and the Book Trade; Ministry of the Medical and Microbiological Industry; Ministry of the Chemical Industry; and the Main Administration of Geodesy and Cartography). the coefficient for staffing work positions with workers was reduced in the industrial enterprises located in Moscow during 1988. It is projected that the mentioned indicator will be at the 1985-1986 level during 1989 in the industrial enterprises of the USSR Ministry of the Construction Materials Industry and the RSFSR State Committee for Sports.

The degree of conformity of the actual coefficient for staffing work positions with workers to the standard one is, properly speaking, the criteria for estimating the balance level for labor resources in developing a branch. If the ratio between the amount of labor resources and the number of work positions is higher in practice than the standard staffing coefficient, this means that there is a shortage of work positions; if it is lower, this is evidence of a surplus of work positions.

With extended calculations, the standard work position staffing coefficient for the basic types of activity in ministries, departments, main administrations, and administrations of the Moscow Goripolkom can be determined as the product of its actual value and the growth index of the shift system coefficient for the operation of equipment. However, it is impossible to use this method when developing summary balances in the

branch segment for the city as a whole and at the level of its administrative rayons because all types of activity are not taken into consideration when doing this. Meanwhile, it is at the city and rayon level that all of the problems, which are connected with the qualitative and quantitative imbalance between work positions and labor resources, are keenly picked up and most sharply sensed.

In order to evaluate the balance between work positions and workers in the branch and territorial sections, it is necessary to know the standard coefficient for staffing work positions with workers for each enterprise, organization and institution located on the city's territory. However, these indicators do not exist in the state statistical accounts and it is impossible to calculate them on this basis. It is necessary to include indicator data in the form of state statistical bookkeeping No 1-RM. This will simplify the procedure for developing a summary balance of work positions and labor resources in the branch and territorial cross-sections and-what is the main thing-permit its scientific justification to be raised and the effectiveness of the measures, which are being carried out to insure a numerical conformity of labor and production potentials at all management levels, to be determined.

The actual coefficient for staffing work positions with workers has been reduced in many industrial enterprises during previous years. In part, this was caused by the fact that the enterprises were not interested in reducing unnecessary work positions. Moreover, it was beneficial for them to keep them. You see, in order to bring the actual coefficient for staffing work positions to the norm one, it is necessary to carry out a series of measures that would insure using equipment in accordance with its design capabilities and to improve the organization of production and labor. A reduction in the number of work positions leads to a decrease in the number of workers and this causes the transfer of the enterprise to a lower category with all the consequences flowing from this: a reduction in the wage fund and in revenues for economic incentive funds and the elimination of certain functional subunits. The enterprises were interested in increasing the amounts of construction in the plans to the maximum since it is basically done using state assets; this permitted new production capacities to be obtained free of charge without calculating the utilization level of existing equipment.

The fact that a considerable portion of the production equipment in industrial enterprises is physically obsolete also contributes to the keeping of unnecessary work positions. Thus, in machine building (for Moscow), the percentage of metal-cutting equipment with a service life of more than 20 years grew from 20 percent at the beginning of the Seventies to 30 percent at the beginning of the Eighties. At the present time, the percentage of physically and morally obsolete equipment is still great

in many Moscow enterprises. In the Moscow Cotton-Printing Factory, for example, the percentage of equipment with a service life of more than 20 years is 38.6 percent; in the Moscow Production Association for the Production of Plastic and Brush Items—37.7 percent; in the Moscow Gorizont Toy Combine-43.0 percent; etc. An analysis of the plans for improving the qualitative structure of the active portion of the main producer goods has shown that the percentage of physically obsolete equipment in these enterprises will be significant in 1990—from 26 to 32 percent. Thus, the numerical balance of work positions and workers at them will not be assured even at the end of the current five-year plan. You see, with the existence of physically obsolete equipment, only part of it operates because the other part must be constantly repaired (in order to keep it in working condition).

The technical re-equipping or reconstruction of enterprises under existing production conditions are connected, as a rule, with significant difficulties. New equipment is being introduced into the existing machinery and equipment system. It is technically rather difficult and economically impractical to carry this out. Frequently it is simply physically impossible to install the new equipment in existing production buildings and structures. The re-equipping and reconstruction are being carried out, as a rule, without halting existing production. This complicates both the construction and assembly work and the current activity of the enterprise workers. As a result, the labor productivity of the builders and the industrial workers is lowered and their wages are correspondingly reduced.

Experience shows that only a complex approach to solving technical re-equipping and reconstruction problems provides an appreciable labor-saving effect. A concentration of efforts on individual production sectors, which is not connected with a basic change in the entire production process, does not provide the necessary result. Increasing the amortization deductions when using more expensive equipment, which is not compensated for in this case by an increase in overall labor productivity within the enterprise, causes an increase in production costs.

USSR Gossnab is allocating the major portion of advanced technologies and new equipment to newly constructed projects and only an insignificant amount of the new items is being directed toward reconstruction and technical re-equipping. Moreover, the new equipment often does not satisfy modern requirements and is distinguishable from the old models only in price. The shift from the discontinuous type of production to a continuous one is raising requirements on the machinery's and equipment's reliability; its present level leaves much to be desired.

The transfer of enterprises to cost accounting and the carrying out of capital construction using profits received should contribute to optimizing the ratio

between work positions and workers. Along with this, it is advisable to provide for additional measures that would stimulate enterprises to reduce unnecessary work positions. In particular, it is necessary to establish conditions under which construction organizations would be identically interested in new construction and in the reconstruction (technically re-equipping) of existing enterprises, to expand the rights of enterprises in selling unnecessary and freed equipment, and to establish a differentiated payment for fixed capital depending on the actual coefficient for staffing work positions.

The existing deduction norms for the common production, science and equipment expansion fund are identical in newly built and old enterprises. That is why the former occupy a preferential position. In order to establish more equal conditions in up-dating the existing machinery and equipment pool in old and new enterprises during the allocation of assets for technical reequipping and reconstruction from centralized financing sources, it is necessary to take the equipment's service life into consideration.

The establishment of a producer goods market should be an effective instrument for accelerating the up-dating of the equipment pool, for strengthening socialist competition which is an important incentive in raising the reliability of the machinery and equipment being produced, and for bringing their price level into compliance with the degree of their social usefulness. This will also contribute to strengthening the role of the enterprises themselves in the technical re-equipping of production and insure a more effective use of the assets in the common production, science and equipment development fund.

The USSR Law on a State Enterprise (Association) stipulates that it is necessary during the compilation of a five-year plan to plan a two-shift and—for unique and expensive equipment—three-and four-shift working conditions based on the certification and streamlining of work positions and the optimizing of their number so as to use production capacities more fully. A lower shift system coefficient can be stipulated only with the permission of the higher agency in coordination with the local soviet ispolkom and appropriate trade union bodies. Thus, the role of territorial planning agencies in insuring the region's balanced development in labor resources is considerably increased.

Oblast and kray councils of people's deputies and the councils of ministers of the union and autonomous republics must develop summary balances of work positions and labor resources in five-year and annual plans. These balances establish the interconnection between the availability of manpower and the number of work positions in the branches of the region's national economy and permit the degree of balancing of these indicators to be determined in enterprises, organizations, institutions, and on the territory as a whole.

The experience in developing a summary balance of work positions and labor resources in Moscow has shown that its compilation for the city's territory as a whole is connected with certain difficulties. To begin with, they are caused by the absence of the necessary statistical information regarding the number of work places in a number of national economic branches. In particular, the USSR Council of Ministers and AUCCTU decree "On the Widespread Conducting of the Certifying and Streamlining of Work Positions in Industry and Other Branches of the National Economy" does not provide for its carrying out in such branches as science and scientific services, health care, physical training, social security, public education, etc. Meanwhile, the percentage of workers and employees working in these branches is, for example, in Moscow, approximately 40 percent. The number of work positions in these areas can be determined more or less approximately from the number working on the largest shift. However, it is not always possible to obtain such information at the level of the city as a whole and at the level of its administrative rayons because this indicator is not a reportable one. Most frequently, the number of work positions in these branches is determined in an expert way based on the balance of Moscow's work positions and labor resources. That is why it is necessary to make an accounting of the work positions in enterprises, organizations and institutions in all branches of the national economy.

The establishment of an information base for compiling the summary balance of work positions and labor resources on a territory is a necessary condition for territorial planning agencies to develop scientifically sound measures for optimizing the ratio between human and material production factors during the 13th Five-Year Plan. The implementation of these measures requires the establishment of an economic mechanism for managing the balanced development of the labor and production potential at a regional level.

Since 1976, the planning commission of the Moscow council's ispolkom has permitted the establishment of numerical limits for the workers and employees in ministries and departments that have enterprises and organizations in Moscow. Knowing the number of local labor resources and having available a powerful planning lever for determining the maximum number of ministry and department workers and employees, it would seem that the insuring of a balanced development for Moscow's national economy regarding labor resources would not pose any special difficulty. Despite a certain decrease in the shortage of personnel in the city (the requirement for them in industry, science and scientific services absolutely decreased during the Eighties and this permitted the numerical limits in the service area and urban facilities branches to be increased), however, the problem of the balanced development of Moscow's economy has not been solved.

It is necessary to shift from administrative and command management to economic methods of management in order to achieve conformity between the number of work positions and the amount of labor resources. One of the economic management methods is the establishment of a pay rate for labor resources which would be an element of the new economic mechanism. Its introduction would permit the economic interest in increasing the efficiency, with which labor and production potentials are used, to be strengthened. However, many fundamental questions concerning the introduction of pay rates for labor resources (the scientific justification of the amounts of pay for a single average staff employee, the role and rights of local councils in establishing and differentiating it, the interrelationships of local budgets with the state budget regarding pay for labor resources, etc.) have still not been solved.

It seems advisable to link the amount of this pay with the expenditures for reproducing manpower (it should either completely compensate for all expenditures or some stable share of them for all regions). The expenditures for reproducing manpower should be determined in a differentiated manner considering the demographic, social, economic, natural, and climatic conditions in developing a specific region.

As an economic lever for influencing the process of achieving and maintaining a region's balanced development in labor resources, it is advisable to use differentiated pay for one average staff employee depending on the actual coefficient for staffing work positions with workers. As this value approaches the norm, the size of the specific payments for labor resources should be reduced and vice-versa.

In our opinion, the enlarging of the local councils' role and responsibility for the development of the territory under their jurisdiction also creates a need for their direct participation in determining the enterprises and organizations that should pay for labor resources (at the present time, only ministries and departments have this right), and the absolute amounts of the payments for one average staff employee.

The carrying out as a complex of such measures as the stock-taking, certification and streamlining of work positions; the establishment of an economic mechanism for incentives and for the effective us of labor resources; and the strengthening of the local councils' role are necessary conditions for eliminating the personnel shortage and for achieving a balance between work positions and labor resources during the 13th Five-Year Plan.

#### **Footnote**

1. Cf. MOSKOVSKAYA PRAVDA, 20 July 1986.

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Labor Inspector on Industrial Safety Problems
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[Interview with Yuriy Grigoryevich Sorokin, AUCCTU chief technical labor inspector, by N. Akritov, ARGU-MENTY I FAKTY correspondent; date and place not given]

[Text]

[Akritov] Yuriy Grigoryevich, how many people in the country are killed annually in production? What are the reasons for this sad statistic?

[Sorokin] According to operational information, 14,377 people were killed in production during 1988.

An analysis of the unfortunate events shows that the main reasons for the fatalities were a low level of production organization; very gross violations of technical, labor and production discipline and equipment safety rules; and irresponsibility and formalism in the work of individual officials to insure work safety. All of this leads to approximately 50 people in the country not returning from work each day.

[Akritov] In such a case, where then does the trade union technical work inspectorate, which—as was written in the 1918 decree—"has the purpose of protecting the life, health and labor of all persons no matter in what economic activity they are engaged," look? And is it needed in general?

[Sorokin] Judge for yourself. Annually, the technical inspectorate stops approximately three million violations, many of which could have become the cause of industrial injuries. During 1988 alone, we halted the operation of 235,000 machines and machine tools and more than 4,200 workshops whose further operation threatened not only the health but also the life of the worker. More than 90,000 officials were fined for these violations, more than 9,000 leading workers were released from the positions they held, and 3,500 people had criminal proceedings instituted against them.

Each year, the technical inspectorate does not accept one-seventh of all items for use until imperfections regarding labor protection are eliminated. One-third of the plans for constructing and reconstructing production projects, which are reviewed by the inspectorate, are returned for revision.

The inspectorate's activity has contributed to a reduction in industrial injuries, including those having a fatal outcome. Compared to 1980, the total number of those injured has decreased by almost 149,500 and the number of those killed in production by more than 5,000 people.

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However, does everything depend on the inspectors? You see, during last year alone, more than 3,000 people, who were drunk at their work posts, were killed in production. Can an inspector, who handles approximately 150 enterprises and more than 24,000 workers on the average, personally keep an eye on each tippler? As long as brigade leaders, foremen, shop and enterprise directors, and, finally, work comrades regard this evil calmly, the situation will not be corrected.

[Akritov] I have the following information: Of the 2,000 inspected new machine tools, machines and equipment produced by industry, only six percent corresponded to labor protection standards. Is it not for this reason that annually 690,000 workers receive industrial injuries in our country?

[Sorokin] Not quite—although up to six percent of fatalities and more than 25,000 of all unfortunate incidents do occur annually in production in the country because of design deficiencies in machinery, mechanism, machine tools, and instruments. In connection with this, we have compiled a list of equipment that does not meet safety requirements. During last year alone, approximately 300 types of machine tools and machines were removed from production facilities. Another 500 models will soon be removed also. Requirements to take steps to eliminate the revealed shortcomings have been sent to the directors of a number of machine building ministries.

The task of our technical inspectorate is to prevent the designing of injury-causing equipment. Our capabilities, however, are not that great. That is why we are raising the question of writing a Law on Labor Protection in which responsibility norms should be written down: Who should be responsible for what and how if he violates, does not observe and does not establish normal work conditions.

Moreover, cases are common where pressure is exerted locally—the so-called "telephone right" snaps into action—on a technical inspector who requires, for example, this or that production to be halted or who refuses to sign an act about commissioning some project. Inspectors are essentially not protected against this arbitrary rule although it was for the purpose of their independence from local authorities that it was decided that only the trade union Central Committee could hire and release them from work. However, this is not a complete guarantee against local authorities at different levels putting pressure on them. A USSR Law on Labor Protection will undoubtedly help to eliminate such phenomena.

[Akritov] We have many laws, and experience testifies that one should not pin all one's hopes on them. Many of them are not being implemented. Does the law, which you are proposing, await the same fate?

[Sorokin] Several conditions must be observed for this not to happen. First, preciseness and clarity in its statement which does not require any additional interpretation or explanation. Second, specific responsibility—in its broad sense—for its violations. Finally, complete knowledge of the law's requirements by all participants in the production process. A general discussion of its draft, which would—at the same time—be a good vehicle for publicizing labor safety, would contribute to this.

[Akritov] Many state and public organizations are engaged in monitoring work safety in the country. Nevertheless, the effectiveness of their work is rather low. In your opinion, what should be done to raise its effectiveness?

[Sorokin] You want to say that too many cooks spoil the broth. I think that there is no harm in adopting the experience of many countries where a single state agency, which is responsible for the organization and condition of labor safety for the country as a whole, exists. The fact is that a large number of the questions that arise in this area have an inter-branch nature and that the combining of the efforts of various ministries and departments is required for the implementation and effective adoption of decisions at a state level. That is why a single state agency, which is provided with the appropriate authority to solve these questions operationally, is required.

[Akritov] Whereas specialists are engaged in labor production in other countries, our people usually do not have any special training. Evidently, the corresponding attitude toward this service and the explanation for the fact that enterprises are now saving wages by primarily reducing workers in this service, flow from this.

[Sorokin] It seems that it is necessary to correct the situation and not aggravate it. At one time, labor protection departments were introduced into technical VUZ at the insistence of the AUCCTU. However, they have now either been eliminated or the number of lectures has been reduced. This is intolerable. Moreover, it is time to begin training specialists in the area of labor protection.

Based on the experience of a number of countries, it is necessary to introduce the "labor protection engineer" speciality; We have the position in enterprises but the speciality does not exist. This is an absurdity. We have been raising these questions for many years. However, first, the USSR Ministry of Higher and Secondary Specialized Education first and, now, the USSR State Committee for Public Education have adopted the directly opposite position, evidently underestimating the importance of this problem. Unfortunately, the branch ministries, in whose hands the requisition for specialists lies, are also taking a passive position. The wishes and even the decisions of the AUCCTU are insufficient to convince them. This is another argument in favor of a Law on Labor Protection.

## Better Utilization of Co-Op Labor Resources Urged

18280133 Moscow EKONOMICHESKAYA GAZETA in Russian No 17, Apr 89 p 9

[Article by A. Glushetskiy, leading scientific associate at Moscow State University, under "Economic Review" rubric: "The Cooperative: Labor Relations"]

[Text] For whom does a contract worker work in a cooperative? Is the social protection of the employed persons guaranteed there? Is it necessary to confirm their occupational suitability for work in the cooperative? These complex questions arose in the practice of the cooperative movement. For the cooperatives are making it possible to establish flexible and mobile forms of the utilization of laborresources. Thus, certain social strata (pensioners, students, undergraduates, etc., who make up a significant reserve for secondary employment, are not able to participate fully in the formation of the material base of the cooperative with shared contributions and to take responsibility through their property for the results of its work. And other categories of workers desiring to earn extra money are not inclined to take personal responsibility for the fate of the cooperative. They have therefore been given the opportunity, without becoming members of the cooperative, to work in it under a labor contract.

In individual cases, the use of a large number of "contract workers" is quite justified and dictated by the specific nature of the work. For example, in the provision of medical and intellectual services (engineering-assimilation, project planning, computing and legal services). Here it is necessary at different intervals to bring in a large number of specialists from different fields in connection with different tasks.

But the existing practice in the application of contractual relations shows that these relations are being transformed from a flexible means of attracting representatives of certain social and professional groups for periodic work in cooperatives to a means of the permanent utilization of significant volumes, in fact, of hired labor. In many cooperatives, the work of those brought in under labor contracts has a permanent character and their number frequently is many times the number of members of the cooperative. These workers, actually forming the basic part of the income of the cooperative, do not subsequently take part in its distribution.

Thus, in one Moscow cooperative cafe, four members of the cooperative who hold leading positions (chairman, deputy chairman, chief accountant and production director) bring in more than 30 people under labor contracts. The wage of the members of the cooperative exceeds 500 rubles a month (not counting payments for annual results) and that of persons working under labor

contracts averages about 300 rubles. There are 60 contract workers for the 8 members of one collective in Frunze that manufactures and installs signal facilities. The level of the wages of cooperative members is twice that of "contract workers."

The existing statistical reporting does not distinguish in the total number of workers in cooperatives persons brought in under labor contracts. A number of surveys allow one to make the expert assessment that at the beginning of the year on the average for the country as a whole there are three people working under contract for every two cooperative members. By the middle of the current year, the number of "contract workers" will already be more than twice that of members of cooperatives. In such a situation, it is expedient to ask the question: Are not cooperative forms of organizing labor being used to cover private enterprise employing hired labor? The cooperative is a type of enterprise based on the collective responsibility of its members, who carry on the work through their own personal labor. The broad use of persons who are not its members in the work there is not inherent in the nature of labor collective ownership and indicates its evolution into a different phenomenon.

A number of specific social problems were indicated that are generated by the growing scope of the utilization of the labor of workers who are not members of the cooperatives.

The unjustifiably high incomes of cooperative members that are causing an increase in social tension in the society are linked not only with the existing practice in price setting and taxation but also, in fact, with the now unregulated utilization of manpower under labor contracts. "Contract workers," forming the largest part of income, receive only a wage and, in contrast to the members of the cooperative, do not take part in the distribution of profit.

Mention should be made of the tendency for some increase in the number of persons who are going over to cooperatives for permanent work. Whereas at the beginning of 1988 the share of people holding more than one job averaged 69.3 percent for all kinds of cooperatives, it was at the level of 47 percent at the beginning of 1989. This share is significantly lower in some cooperatives: such persons account for 27 percent of those in cooperatives for public dining, 30 percent of those for the production of confectionery and baked goods, and 32 percent of those in trade and purchasing cooperatives. At the same time, the relative share of pensioners, students and housewives among those working in cooperatives is extremely low—no more than 15 to 20 percent.

The problem arises of the social protection of persons working in cooperatives under labor contracts in the conditions of primary employment. They are often deprived of the possibility of receiving pensions and other benefits and payments under social insurance.

Despite the requirements of the Law on Cooperatives in the USSR, about 80 percent of cooperatives are not registered as insurers and do not make payments to the social insurance budget. Such a situation is explained in part by the formal attitude of trade union bodies, which are extremely reluctant to register independently operating cooperatives. The members of the cooperatives do not want to make the expenditures in question, because they are direct deductions from the amounts subject to distribution among them in accordance with the annual results. Depending upon the type of activity, deductions to social insurance amount to 4.4 to 14 percent of the sum of funds not expended for the remuneration of the labor of all those working in the cooperatives, including

those holding more than position.

It is necessary to undertake a precise "docking" [joining] of different standard enactments regulating areas where there may be activities of cooperatives utilizing the labor of persons brought in under labor contracts. Otherwise there may arise different versions and different "ways around" particular points of laws and ukases. Thus, the ukase of the USSR Supreme Soviet Presidium "On Leasing and Leasing Relations in the USSR" specifies that in the leasing of land by persons employed in individual labor activity in agriculture, the size of plots is determined "taking into account the possibility for their cultivation through the personal labor of the members of a peasant farm." But in accordance with Paragraph 5 of Article 33 of the Law on Cooperatives in the USSR, these persons may unite in cooperatives for the joint operation of private subsidiary plot and, in principle, they can also utilize the labor of "contract workers." How will the size of the plot of land be determined when, in accordance with Paragraph 2 of the indicated ukase. its lessee is not an individual person but a cooperative: by the possibility of its cultivation through the personal labor of members of the cooperative or by the possibility of bringing persons into the cooperative under labor agreements?

It must be recognized that the positions of the Law on Cooperatives in the USSR regulating the bringing of workers into cooperatives under labor contracts turned out to be inadequately effective.

In the first place, according to Paragraph 2 of Article 25 of the law, the right to bring in citizens to work under a labor contract who are not members was granted to cooperatives of all kinds with no limitation on the sphere of their activity. But Article 40, which stipulates that the relationship between the number of persons brought in to work in the cooperative under a labor contract and the number of members of the coopergative is determined by the executive committee of the local soviet of people's deputies taking into consideration the public need and the type of work of the cooperative, extends only to cooperatives in the production and services areas. Thus, a significant part of the cooperatives, and above all nontraditional agricultural cooperatives arising along with the kolkhozes were outside the regulation of this side of their work.

Taking into account the prospects for the development of new kinds of agricultural cooperatives under the conditions of the extensive leasing of land (at the beginning of January 1989, there were already 2,000 such cooperatives in operation), the resolution of the question of allowable limits and forms of their utilization of the labor of citizens who are not members of the cooperative appears to be an extremely urgent matter.

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In the second place, even in those areas where the local soviets have the right to determine the ratio between "contractual workers" and members of the cooperative, this position of the law is essentially not being realized. Most ispolkoms do not stipulate such proportions and do not control this aspect of cooperative work. This is explained by the absence of a methodological basis for the establishment of the appropriate proportions.

We see two possible ways to resolve the problem.

The first was to introduce more precise legislative limitations in the Law on Cooperatives in the USSR. Thus, it can be stipulated that, in addition to the one-time involvement of specialists, the cooperative has the right to bring in a strictly determined number of pensioners. invalids, students and housewives for permanent work under contract. Such a system, in particular, is applied in the production cooperatives of handicraft workers in the GDR, where, besides the basic members of the cooperative, they also allow supplementary members, the relative share of whom does not exceed 2 percent at the present time. The legislation of the GDR delimits the production cooperatives of handicraft workers using on a strictly limited scale the labor of the so-called supplementary members as well as of private artisans applying hired labor.

The second path is the utilization of the methods of economic regulation and above all an efficient tax system. It must become disadvantageous for cooperatives to use a great deal of labor of workers who are not their members.

The ukase of the USSR Supreme Soviet Presidium dated 23 February 1989 "On the Tax on the Income of Cooperatives," which proposes differentiating the tax on the income of cooperatives among other factors and as a function of the "share of labor of cooperative members directly in general labor expenditures." But there are doubts about the effectiveness of the proposed measure. Above all the problem arises of the scientific validity of the determination of this share. If it can be determined, then why, in this case, not realize the right of ispolkoms to establish and control it directly? An excessively complicated procedure for the differentiation of one tax as a function of a large number of factors can mean that they will cancel each other out and that there will be no stimulating or controlling effect.

If one takes the path of the economic regulation of the body of workers in cooperatives, then it appears expedient to establish a special tax for cooperatives—payment for manpower resources and substantially higher for those working under labor contracts than for cooperative members.

At the same time, the ispolkoms of local soviets should be granted the right as needed to lower this payment (and not to levy at all in specific socially justified cases) for individual kinds of cooperatives—caring for children, invalids and the aged. Nor is it advisable to collect payment for invalids and pensioners who are hired. These measures would counter the attempts of cooperative members to hide personal income from progressive taxation, entering it for persons ficticiously brought in under labor contracts.

The dissatisfaction of the population is frequently justly evoked by the quality of the output of cooperatives and by the inadequate standards of services. To a considerable degree, this has to do with an inadequate level of occupational training of persons working in cooperatives.

According to the Tula Oblispolkom, for example, the founders and chairmen of a number of cooperatives in Tula were people who previously had nothing to do with the corresponding kinds of activities. In particular, the chairman of a cooperative for the sewing of fur products has an education in music and leads a musical ensemble. The chairman of a sewn-goods cooperative is a polytechnical engineer, the chairman and deputy chairman of a construction cooperative are journalists and the chairman of the "Cheburek" Cooperative is a worker in the technical servicing of motor vehicles.

Checks have verified that one-third of the workers in cooperatives for public dining do not have the necessary occupational training and have no elementary knowledge in matters of sanitation and hygiene. It is no accident that in the course of last year state supervisory offices temporarily closed more than 300 public dining cooperatives and fined more than 600 workers.

Today, in the registration of cooperatives, including those in public dining, neither a labor book nor a diploma for professional training is required. Such a practice runs counter to the requirements of the Law on Cooperatives in the USSR, Paragraph 4 of Article 40 of which states that work in a cooperative that in accordance with legislation requires special knowledge and habits can be performed only by persons having the necessary training, professional suitability and appropriate education.

Clearly it is now essential to stipulate that only persons with professional training and having confirmed their qualifications by passing an examination or through attestation can be members of a cooperative for the manufacture of goods for the population or public dining. Such experience has been gained in a number of socialist countries, in particular in the GDR, where handicraft boards uniting cooperatives and private owners perform the strictest professional verfication of all those wishing to be employed in the handicraft. This helps to maintain the high professional authority of the handicraft sector of the country's economy.

It appears that the experience of the socialist countries with a rich tradition in the regulation of the labor relations of the cooperative sector of the economy requires more detailed study and utilization

# Number of Operative Cooperatives in the Union Republics on 1 January 1989 (data of USSR State Committee for Statistics)

	Total Cooperatives	Domestic Services	Public Dining	Production of Consumer Goods	Procurement and Processing of Secondary Raw Materials	Other Kinds of Cooperatives
USSR	77,548	23,716	7,583	16,152	2,353	27,744
RSFSR	38,895	12,123	3,479	7,183	1,090	15,020
Ukrainian SSR	13,534	4,252	852	2,575	510	5,345
Belorussian SSR	2,518	756	97	354	116	1,195
Uzbek SSR	3,226	1,113	423	517	56	1,117
Kazakh SSR	4,572	1,391	587	841	196	1,557
Georgian SSR	2,089	378	403	1,051	35	222
Azerbaijan SSR	1,291	421	255	309	40	266
Lithuanian SSR	1,569	379	143	528	70	449
Moldavian SSR	1,644	566	85	324	40	629
Latvian SSR	1,190	453	81	240	32	384
Kirghiz SSR	1,265	413	205	245	40	362
Tajik SSR	723	258	130	98	39	198
Armenian SSR	3,616	682	658	1,611	22	643
Turkman SSR	447	200	95	112	26	14
Estonian SSR	969	331	90	164	41	343

# AUTOMATION, AUTOMATED SYSTEMS

## New Machining Center Produced by Odessa 'Mikron' Association

18230065 Moscow SOTSIALISTICHESKAYA INDUSTRIYA in Russian 15 Jun 89 p 1

[TASS article: "On the Leading Edge"]

[Text] The Odessa "Mikron" Production Association is the creator of the first Soviet machining centers with numerical control and robot manipulators, as well as flexible manufacturing systems. Mikron's machining centers have won eight gold medals at various international exhibitions.

Under the conditions of economic accountability, self-financing, and cost recovery the association's collective, in close coordination with a number of other scientific institutions of the country, has created the conditions for rapid preparation of the machine tool modulese which are up to world levels. Today they are developing here a new family of machine tools which will guarantee stable high quality production and increased labor productivity. The new "Mikron" module system is an important step for domestic tool making on the road toward the creation of automated plants technology.

### Status of Construction at Ulyanovsk Electronics Center Noted

18230051 Moscow SOTSIALISTICHESKAYA INDUSTRIYA in Russian 24 May 89 p 2

[Article by V. Vorobyev, correspondent: "The Pace Is Disrupting the Plan"]

[Text] Our newspaper has discussed the center for using microelectronics and automation in machine building which is being established in Ulyanovsk. Let's recall that this is a major complex of scientific research institutes, design bureaus, experimental and serial plants. Its task is to develop and produce microelectronic junctions of apparatus and integrating transducers.

We still have a long way to go—almost eight years—before the entire complex goes completely on line. But the first phase of the NII [Scientific Research Institute] for Semiconductor integrating Transducers, along with an experimental-production center, is supposed to become operative as early as next year. How do matters stand at the construction site?

Earthmoving operations are still being conducted, foundations are being laid, as well as various types of utilities and communications. It is difficult to call such a pace "crash" or "shock." But you cannot complain to the construction people about this. They fulfilled their plans for last year and for the first quarter of the present year ahead of schedule. The contradiction is simple to explain: the assigned tasks have been reduced. The

network schedule for start-up facilities for next year has provided for operational volumes exceding the plan five-fold. Two official documents establish utterly different paces of construction. K. Vikhlenshchuk, chief of the Ulyanovskstroy Territorial Construction Association of the Ministry of Construction in the Southern Regions of the USSR, lays the blame on the planners:

"For two years they carried on loud discussions about the complex, but they were not able to give us the documentation on time. Moscow's Promstroyproyekt made a particularly great number of excuses. We received many blueprints only in December of last year. And that means that our requisitions for materials were not received. And so we have been unable to fully 'load' even the specialized Fifth Trust with its asigned tasks, not to mention the other sub-divisions. The idle times have been and remain enormous.

"Furthermore, it has also been discovered here that the construction project lacks enough heat. We have had to order a plan for expanding TETs-1 and a new boiler, as well as to extend the large-diameter heating line.

"They also made a mistake in siting the comples's production facilities. At first they planned to locate not only the institute's wings, but also the serial plants in the urban zone. This proved to be impossible. All kinds of hindrances affect the quality of the finest products. And so we have been compelled to seek new sites. And again this entailed losses of time. In short, the construction project has been proceeding at a slow pace, although it's high time that we speed up greatly.

"Meanwhile, the recruitment of personnel for the center has already begun."

"Some 1500 persons have been enrolled," stated A. Ryzhevskiy, the general director. "Included among them are 7 doctors of sciences and 50 candidates of sciences. Creative collectives are emerging and formulating the scientific directions of the institutes' activities. They have been assigned the task of working with the planners, setting up ties with the machine-building ministries and the USSR Academy of Sciences. A certain scientific inventory has been accumulated thanks to the leasing of laboratories in the country's various institutes.

"I saw this scientific accumulation in its physical terms. From the outside it is not very impressive: four drawing boards enclosed in glass. They include tiny shining parts of various forms. These are pressure transducers of the following types: piezoelectric, metal-film, semiconductor, and optical electronic. They are capable of determining the pressure of liquids, gases, electrical and magnetic fields, etc."

"In order to produce such instruments, we need a high level of microelectronics," explained A. Ryzhevskiy. "The complete set of parts includes miniature solar batteries, optical fibers, and ceramic metals [cermets]." For now the institutes have at their disposal one eightstory building. Its offices and laboratories are chock-full of computers and adding machines. Working in one of them are scientific associates from a branch of the Soviet-American enterprise entitled "Dialogue." They are helping to outfit the center with the most up-to-date equipment.

An inter-sectorial coordinating council of the chief designers of the sectors has been set up for using microelectronics and automation in machine building. The initial steps have also been taken in establishing a system for training scientific personnel. There has been an agreement in principle with Goskomobrazovaniye for inaugurating graduate work. The computerization of nearby schools is being planned.

That is why it is so important now to remove all obstacles at the start and to proceed more energetically to unleash construction operations.

#### CIVIL AVIATION

### Minister on Air Safety Issues

18290155 Moscow VOZDUSHNYY TRANSPORT in Russian 6 Apr 89 p 2

[Article by USSR Minister of Civil Aviation A. Volkov: "The Crew Is at the Center of the Problems"]

[Text] Under the conditions of the sector's dynamic development and the increase in air traffic density and aircraft passenger capacity, air safety has assumed special socioeconomic and moral significance.

Over the past 3 years of the five-year plan, major steps have been taken to improve the organization of flying work. The composition and content of regulatory documents are being restructured. A flight methods complex with the departments and sections of sectorial scientific institutions functionally subordinate to it is being established under the Academy of Civil Aviation. A flight methods council made up of the representatives of aircraft commanders and instructor pilots from aviation enterprises has been established under the GlavULS [Flight Service Main Administration].

Effective steps are being taken on the problems brought to light in the investigation of aircraft accidents. In particular, two-stage flight tests of the Tu-154 have been conducted. Hard landings by heavy transport aircraft have been analyzed. Appropriate recommendations have been made based on them.

Steps have been taken to improve airspace organization in 40 regions. An experiment to introduce strict flight paths is being conducted based on the Mineralnyye Vody Airport. One-way traffic has been established on 18 airway segments, and 14 straightened routes have been introduced.

### I.

What results have been achieved from the steps taken? In 1988, the number of aircraft accidents dropped by 12 percent compared with 1987, and the number of equipment failures was reduced by a factor of 1.6. There were less reasons for emergency accidents and damage to aircraft on the ground. The number of aircraft accidents because of equipment failure declined by 40 percent as much and there were less accidents involving helicopters. More than 70 percent of the administrations and production associations and 90 percent of the unified aviation detachments fulfilled their production targets without aircraft accidents involving fatalities caused by aviation workers.

For the first time, safety on Aeroflot's regular routes came close to the indicators for the United States and became better than the average for the ICAO [International Civil Aviation Organization].

At the same time, the steps being taken are insufficient. The consequences of aircraft accidents were more severe last year compared with 1987.

Many unresolved problems which depend directly on the command and flight personnel at all levels have had a negative effect on flight safety:

- —the inadequacy of programs for training cockpit personnel:
- —the formal attitude of command and flight personnel toward crews' practice in simulators;
- —carelessness in the interaction between crews and air traffic controllers; and
- —flight operations officers do not always implement the requirements of flight operations and ATC manuals.

A negative assessment of the go-around has taken root in recent years. This has a detrimental effect on the psychological readiness of crews to make the only correct decision to correct errors before landing.

#### II.

Let us look in more detail at the main directions where the unresolved problems of air safety have an especially harmful effect.

Analysis of aircraft accidents caused by hard landings has shown that the crews have had inadequate professional training.

It has long been necessary to instill personnel with the need to work by themselves independently. And this must be learned. The decision has been made to send cockpit personnel to training centers for 10 days each year to exchange work experience on a discussion basis. To provide the opportunity to hear lectures on advanced experience in organizing flying work and providing for flight safety, and to consult on those subjects which they will have to pass for their records. Finally, the examination itself with an assessment of knowledge must be in accordance with the principle of "he knows—he doesn't know," not in accordance with the five-grade system.

This is a qualitatively new approach to professional training for specialists. This system will apply to roughly 100,000 specialists.

The most important direction in organizing flying work is increasing the volume and level of training in simulators. Part of the KTS [technical equipment] of the Tu-154 and II-86 has already been modified for training cockpit personnel under wind shear conditions, in preventing a dive under the glidepath, and for flight at high angles of attack.

It is necessary to speed a solution to the "copilot" problem. To increase the amount of his training both in simulators and under airport conditions. To devote special attention to the experiment to shift to a crew consisting of the commander and his assistant, identically trained professionmally and identically paid. The object of this experiment is to have a backup for the aircraft commander's work under instrument conditions.

Analysis of the prerequisites for aircraft accidents, as well as the causes and conditions that engender them, shows that most of them are directly or indirectly linked with poor performance and technological discipline, and at times simply lack of discipline; 41 percent of all the aircraft accidents in 1988 took place precisely because of lack of discipline.

Under the conditions of democratization, command and supervisory personnel, together with political workers and party and public organizations, must take a more active role in shaping and strengthening a respectful attitude in each aviation specialist toward adherence to the laws, manuals, and other documents which regulate activity in civil aviation.

Along with the forms and methods of work which we utilize in resolving this problem, a positive role will be played by introduction of the status of the aircraft commander.

Although the number of aircraft accidents and their prerequisites attributable to aircraft equipment failures declined in 1988, the proportion of them in the total number of accidents and prerequisites continues to be significant.

There were aviation accidents in 1988 because of flagrant violation of operating rules by ATB [aircraft maintenance base] engineering and technical personnel. Serious shortcomings were revealed in the organization of the technical maintenance and repair of aircraft equipment.

The basic reasons for unsatisfactory technical maintenance and repair of aircraft equipment continue to exist: the inadequate professional level of specialists, failure to adhere to technological discipline, and poor supervision by the OTK [technical control section] personnel. The most flagrant violations of technical operating rules were in the Far East, Krasnoyarsk, East Siberian, and Azerbaijan Administrations of Civil Aviation and at Plant No 406.

The prevention of aircraft accidents because of equipment failures assumes particular importance under conditions in which the basic fleet of aircraft are coming to the end of their service life.

There is a great deal of criticism of the quality of aircraft equipment repair at our repair plants. Failure to observe technical procedures, poor workmanship, and shortcomings in production organization are the reasons for aircraft accidents and their prerequisites which sometimes take place right after an aircraft leaves the plant.

The problems of aircraft repair work—lack of work areas, insufficient spare parts delivered from the Ministry of the Aviation Industry—are well-known. They are being resolved to the extent that it is possible to resolve them now. However, the problems of the quality of aircraft equipment repair (and they depend on the workers in the GlavUEAT [possibly, the GUERAT: Operation and Repair of Aviation Technical Equipment Main Administration] and the plants) are being resolved unacceptably slowly. Aviation enterprises are demanding with good reason that the Basic Conditions for the Repair of Aviation Equipment be revised with the aim of increasing the responsibility of those who turn out a product for its quality.

An increase in flight safety under air traffic control has not been achieved. In the Tyumen, Yakutsk, Uzbek, East Siberian, Urals, Kazakh, Ukrainian and North Caucasus Administrations, work has not been carried out to tighten supervision of air traffic, improve the professional training of controllers, and provide for staffing.

The management of the GlavUVD [Air Traffic Control Main Administration] must take decisive steps to improve ATC reliability and provide for flight safety, but for 3 years the administration has not been able to revise the Air Traffic Service Manual and bring it into conformity with the NPP [Flight Operations Manual].

In 1988 there were collisions between aircraft and objects on the ground, failures of radio and lighting facilities and equipment at airports, and cases of unsatisfactory power supply.

The condition of landing lighting systems is creating serious concern. At airports that handle instrument landings, more than 40 percent of the high-intensity lights are being operated after their period of service has expired. Replacement of this equipment is not being carried out practically.

And I would like to draw the attention of administration chiefs to one more question important for flight safety as well as in the social area. I am referring to the organization of meals in the preventive clinic and on board. The complaints by cockpit personnel about the meager amount of food and the lack of variety are justified.

In the transition to the new economic mechanism, a tendency has been noted in certain administrations to interrupt technological processes associated with flight safety for the sake of momentary economy and gain (shutting down radio electronics facilities, suspending the operation of navigation systems, and so forth). This is extremely dangerous.

A decision has been approved by the ministry on the drafting of sectorial standards for the services of enterprises in order to stop the negative trend. Subsequently these standards will serve as the basis for the certification of enterprises and services as in foreign airlines. We plan to complete this work in 1990. Acceleration of the development of the economic mechanism by taking safety into account, but not at the expense of it, is required from economical service as a whole.

### III.

According to the data from many years of research by us and other countries, the human factor lies at the basis of 70 to 80 percent of aircraft accidents. In the majority of developed countries there are national programs to study the influence of the human factor on flight safety. This is a critical problem for us as well.

However, it is precisely in this regard that the situation is least favorable for us. The resources and scientific forces directed at this are clearly inadequate. Studies are conducted separately and are not coordinated, and priority directions have not been singled out. They are being limited more and more with the shift to cost accounting. Thorough study, systematization and analysis of the errors and violations which lead to aircraft accidents are required.

The attention being devoted to the problems of ergonomics and the psychological aspects of flying work is obviously insufficient and the test flight complex of the GosNII [State Civil Aviation Scientific Research Institute] has not been equipped in this work.

It is fundamentally important that a flight crew's reliable work depends not only on its training and personal qualities, but to no less an extent on the conditions in which it is carrying it out. The effectiveness of the work of flight specialists essentially is provided for by the work of all the ground services. The crew is on the front line of this struggle. It is the duty and responsibility of all ground services, and not least of all the enterprises and organizations of industry, to do everything to facilitate its performance of this most complicated task.

It is common knowledge that well-organized preventive work is one of the directions for improving flight safety.

There are new approaches in organizing it. First of all, the Main Inspectorate has assumed the function of organizing the drafting of preventive measures. Secondly, improvement in preventive work is to be based on improvement in the quality of aircraft accident investigation. The USSR Gosavianadzor [Flight Safety of Civil

Aviation Commission] investigates only about 10 percent of the total number of aircraft accidents and 20 percent of the severe accidents. The remainder are investigated by commissions of the Ministry of Civil Aviation and administrations, which are made up of specialists from the appropriate services. Investigations are often conducted on a level that is insufficiently professional with attempts to protect "the uniform." And it is no coincidence that every year the USSR Gosavianadzor and the Main Inspectorate return up to 100 cases each year for incomplete investigation that was of poor quality and unobjective.

Thirdly, a special working group of the GosNII, with participation by specialists from other institutions in the sector and the Main Inspectorate, has been established for quarterly analysis of the materials from investigation of prerequisites and materials from the system of voluntary reports. This group will prepare recommendations on the prevention of aircraft accidents.

We must eliminate shortcomings in the work of all components in the sector which prevent effective implementation of the Special-Purpose Program to Increase Flight Safety, which has been corrected to take into account the conclusions and recommendations from analysis of the status of flight safety in 1988. At the same time, we must keep this feature in mind for 1989: compared with the level envisaged by the five-year plan, 4 percent higher passenger turnover is planned with adherence to the limits set for aviation kerosene at the five-year plan level.

It follows from this that there are increased demands for quality in the flight and technical operation of aircraft, accuracy in the control of air traffic, reliability in the work of RTS [radio electronics facilities] and communications, and for a power supply which eliminates the unjustified diversion to alternate airfields. We are required to have a reliably functioning system which ensures that the sector's work is carried out safely and efficiently.

Ministry Official Explains Aeroflot Fuel Situation 18290197a Moscow VOZDUSHNYY TRANSPORT in Russian 16 May 89 pp 1-2

[Interview with I. Shishkov, chief of the MGA [Ministry of Civil Aviation] UGSM [Petroleum, Oil, and Lubricants Administration], by V. Tamarin "The Intricate Channels of Kerosene Rivers"]

### [Text]

[Tamarin] The work rhythm of all enterprises in the new economic conditions depends to a significant degree on supplying them with fuel resources in a timely manner and effective use of these fuel resources. We know that civil aviation is a major consumer of aviation fuels in our nation, and use of a main type—aviation kerosene—is annually increasing. Simultaneously in recent years, flight disruptions have occurred at a whole series of

airports due to interruptions in the supply of aviation kerosene which caused justifiable complaints from passengers and our sector's workers and their critical statements in the VOZDUSHNYY TRANSPORT newspaper. What are the reasons for these disruptions?

[Shishkov] Aviation kerosene is on a list of petroleum products which are included in the state order and its distribution is conducted by USSR Gosplan [State Committee for Planning].

For ensuring normal operations, each airport must establish and maintain production reserves of aviation kerosene at the needed level, depending on its daily consumption and time of delivery of planned shipments from distribution points. For airports near rail lines, the size of production reserves must be not less than a 10 to 11 day supply and, for northern airports, the volume of reserves must total not less than a six month supply at the end of the shipping season.

Over the last decade, increased aviation kerosene consumption at Siberian airports has grown by more than two times the sector average. This has significantly complicated the task of ensuring the operation of airports since the total main volume of fuel is transported to northern airports during the shipping season period from June through September. But at the same time, this is also the period of maximum air transport volume throughout all regions of the nation. As a result, Aeroflot's demand for aviation kerosene resources in June through September totals more than 45 percent of the annual volume and is not covered by allocated resources by almost 800,000 tons due to its irregular production by industrial plants. We must cover the shortage of resources during the summer period at the cost of surplus resources during the January through May period from accumulated resources.

Unfortunately, with the development of airport complexes for receiving first class aircraft, a number of enterprises forget about the corresponding growth of fuel demand and do not find the assets for construction and development of GSM [Petroleum, Oil, and Lubricants] storage areas. At the Magadan Airport when the VPP [Take-off and Landing Strip] capable of handling IL-62's and IL-76's became operational, fuel demand grew more than 1.5 times and daily consumption in July through August totals 900-950 cubic meters while the airport's GSM storage area has a reserve capacity of 4,000 cubic meters all told. They are operating there on what they call "from the wheels" when a fuel delivery under ideal operating conditions for railroads, oil tank farms, and Morflot [Sea Transport] takes more than 25 days.

The amortization time period which the reservoirs have at the airport expired in 1985 while, at the same time, construction of new GSM storage areas began in 1983, 58 percent of total capital outlays had been acquired, and construction was generally laid up in 1987.

[Tamarin] What steps did our enterprise take regarding the Magadan Administration of the RSFSR Goskomnefteproduct [State Committee for Oil Production] which must deliver fuel according to a direct contract?

[Shishkov] Well none since we ourselves were guilty of non-supply to the fund during the first six months of the year by a volume of 8,400 tons: we could not get it anywhere. And we can explain the under-delivery of 5,300 tons during the third quarter due to lack of tankers, resources, poor weather, etc. At the same time at a whole series of airports near rail lines, the question of uninterrupted operations depended on one 50-ton tank car.

The Tyumen Civil Aviation Administration in accordance with a direct contract for fuel deliveries from the Tyumen Administration of RSFSR Goskomnefteproduct received more than 13,000 tons of aviation kerosene less for 9 months of 1988 and, in order not to paralyze airport operations of this very important rayon, approximately 12 tons of aviation kerosene were delivered here during the third quarter at the cost of not supplying other airports from the MGA transit funds. According to the annual totals, despite reducing the funds by 12,000 tons in the fourth quarter, which the Tyumen Administration categorically protested, under-deliveries totaled 11,300 tons which were lost for the sector. And once again no protests to the supplier. And this fuel would have been sufficient for a month's operations at such airports as Gurev, Neryungri, Balakovo, Uralsk which stood idle.

[Tamarin] As I understand it, the moral damage inflicted on Aeroflot due to disruptions in the normal fulfillment of flight schedules and the airports' material costs due to idle time in connection with the lack of fuel depends not only on fuel deliveries but also to a significant degree on the readiness of the fuel industry for growth of passenger transport. Is that so?

[Shishkov] Yes. More than 100,000 rubles in tariff sanctions are paid by civil aviation enterprises to railroads for not emptying fuel from tank cars in a timely manner. In the North Caucasus Administration, the Astrakhan Airport alone annually spends 10 to 30,000 rubles for payment of fines since there is no GSM storage area there. Volga Administration enterprises spend 20-30,000 rubles annually for payment of fines for this very reason, Kazakh from 10-30,000 rubles, and Uralsk pays about 5-10,000 rubles in fines.

TU-154 flights began at Kurgan Airport in June 1986 and fuel demand there has risen almost three times and nothing has been done for development of the GSM storage area or for approach paths for fuel deliveries. During 1988, instead of a needed increase of the fuel tank farm areas at a number of airports, a reduction of GSM operational storage capacity of nearly 300,000

cubic meters has occurred due to their technical condition. Since 1983, vertical tank storage has not been established at the airports of Kazan and Novokuznetsk, and at Barnaul, Khatanga, Beringovskiy, Okhotsk, and Tuva.

At the Bukhara Airport, the GSM storage area was accepted from the builder in 1984 but it has not operated till now although almost 30,000 rubles of amortization allowances have been paid during this period.

[Tamarin] Under these conditions, does that mean very strict compliance of limited discipline of fuel demand is necessary?

[Shishkov] Unfortunately, not everyone understands this. This situation has led to the situation that reserves of aviation kerosene at airports near rail lines at which enterprises had a total of 200-230,000 tons of fuel at their disposal at the beginning of the year, by 1988-989 available fuel has been reduced to 130-150,000 tons. Further reduction of reserves is practically impossible since 25-30 airports are systematically standing idle without fuel at this level.

For 1986-88 alone, North Caucasus Administration, Domodedovo and Vnukovo PO's [Production Associations], Krasnoyarsk, Magadan, and Far East Administrations expended approximately 130,000 tons of aviation kerosene over their limit. And this list could be continued.

There are explanations for allowable excessive consumption but there are no resources to cover them.

Who will reimburse these enterprises for the costs they bore due to the lack of fuel? How do we answer the passengers who could not fly on time on their paid tickets? Maybe the heads of those administrations who fulfill the plan "at any price" can answer these questions?

[Tamarin] But could the situation created by excessive fuel consumption not lead to a situation where the sector's operations are finally paralyzed since many enterprises are working on the principle of—fly while there is fuel, a demand for air transport, and good weather?

[Shishkov] This threat always exists. In 1988, Aeroflot could provide air transport in the most intense period of operations due to over deliveries of more than 120,000 tons of aviation kerosene to funds during an 8 month period, but as soon as deduction of the over-deliveries began in September and during the fourth quarter, numerous disruptions of airport operations began immediately. And even during that time over consumption of fuel continued.

Furthermore, beginning with the first days of January, excessive consumption began anew. During the months of January and February alone, excessive consumption totaled more than 28,000 tons, including 8,900 tons by Tyumen Administration, 4,000 tons by Far Eastern Administration, 2,400 tons by Magadan Administration, 2,000 tons by TsUMVS, and others.

In January alone, Domodedovo Airport performed 255 additional flights for which 5,400 tons of aviation kerosene were consumed which was intended for creation of reserves for the summer period. In 1988, 2,720 additional flights were completed from Domodedovo Airport which consumed approximately 60,000 tons of aviation kerosene. These flights were not predicted in the airport's plans and the MGA's GSM Administration was forced to organize additional shipments from Polotsk, Gorkiy, Yaroslavl and other points to avoid disruptions in operations. This year an airport will also have to pay up to 1.5 rubles [sic] for each ton over the plan for these shipments in connection with the transition of railroads to new economic conditions.

[Tamarin] The fuel supply situation will be complicated in 1989. And what does the wholesale market offer?

[Shishkov] Gossnab has approved a list of petroleum products which must be supplied in a wholesale trade system beginning in 1989. Analysis of the first two months work has shown that, despite the contracts concluded, real work toward realizing them is not being conducted. Demands are not being made to suppliers for fulfilling contractual agreements, and as a result—territorial petroleum products supply agencies do not have any influence on production plants and their main administrations.

GA [Civil Aviation] enterprises work on supplying petroleum, oil and lubricant products in 1989 requires a completely new approach to this problem since a significant portion of petroleum products must be delivered in a wholesale trading system at the same time aviation enterprises do not have any responsibilities on this issue which may inflict significant damage on our sector.

Therefore, issues of compliance with planned fuel consumption discipline and monitoring fulfillment of contractual obligations for deliveries are issues of primary importance.

**TU-204 Flight Tests Continue** 

18290197b Moscow VOZDUSHNYY TRANSPORT in Russian 1 Jun 89 p 4

[Article by L. Stukalina: "A TU-204 'Dropped In' at Kiev"]

[Text] The new TU-204 passenger jet aircraft, designed by the design bureau imeni Academician A.N. Tupolev, landed at Borispol Airport for the first time on 29 May. It is designed for flying on air routes 3,500 kilometers long, carrying 214 passengers, and traveling at an average speed of 810-850 kilometers per hour.

The airliner was designed on the basis of the latest achievements in science and technology in the areas of aerodynamics, electronics, and aircraft design. Two powerful jet engines, designed under the guidance of Chief Designer P.A. Solovev, meet all of the ICAO's [International Civil Aviation Organization] requirements: low noise and they allow attainment of fuel savings which are one and a half to two times greater in comparison with other modern Soviet-built aircraft of this class. The flight-navigation instrument system which consists of digital computerized automatic aerial navigation and control systems, a critical mode warning and aircraft system, and ground danger approach systems greatly simplify the crew's work and increase reliability and safety of flight.

The TU-204 passenger compartment is equipped with new, more comfortable seats and has a baggage container loading and unloading system. Flight testing of the TU-204 new medium range passenger aircraft began this year, and it has already undergone 25 flights and the new airliner is already on Ukrainian soil. Aircraft Commander Andrey Ivanovich Talalakin, one of the leading test pilots of the OKB [Experimental Design Bureau] imeni Academician Tupolev, answered this correspondent's question:

"The aircraft is undergoing flight testing and is completing a flight from this airport for the purpose of checking the operation of onboard equipment in accordance with the program. Today's flight was conducted at an altitude of 11,000 meters along a Moscow—Tallinn—Riga—Minsk route with a landing at Kiev. The equipment operated flawlessly."

The aircraft was met at Borispol by service representatives of the Ukrainian Administration and by workers of the recently established UkrUGA [Ukrainian Civil Aviation Administration] temporary scientific production association for mastery of the TU-204 aircraft and a mastery group established at Borispol ATB [Air Technical Base]. They acquainted themselves with the design features of the new jet liner—Borispol aviators will begin operational flights on the TU-204 next year.

The short stop, necessary for refueling, lasted 30 minutes altogether. And the new aircraft was once again ready for take-off. It will soon fly to Le Bourges [France] for an air show.

Future of Cryogenic Aviation Pondered 18290179 Moscow SOTSIALISTICHESKAYA INDUSTRIYA in Russian 17 May 89 p 2

[Article by S. Lyubarskiy and S. Popov: "Cryogenic Aviation: The Pros and Cons"]

[Text] In 1987, according to the data of the Production and Traffic Control Central Administration of the Ministry of Civil Aviation, 2,282 trips were delayed, and 6,612 runs were made with additional landings for fuel fill-ups, because of a lack of aviation fuel. Moreover, these data do not take into consideration the situation for local airlines: for them we would have totally depressing figures.

In April 1988, however, the mass information service informed us in a friendly way that the first airplane in the world capable of using liquid hydrogen in the form of fuel had taken off into the air. It was confirmed that substituting petroleum fuel with cryogenic fuel would in the future substantially expand the possibilities of domestic civil aviation and would reduce the harmful ecological effect of airplanes on the atmosphere.

The merits of hydrogen as a fuel are indisputable. We shall attempt to examine this fuel, however, in the perspective for the country's entire energy system.

To start, let us define more precisely what substance is generally expedient to regard as fuel. To all appearances, it is a substance the internal energy of which surpasses the energy expenditures for its extraction.

There is a great deal of hydrogen on earth, but it is all found in the form of compounds: water, petroleum, natural gas, etc. It is absurd to separate hydrogen from oil or gas: after all, it is hydrogen that is regarded as a substitute for them! This means that the basic method for industrial production of hydrogen is the decomposition of water. We know from a school course in physics, however, that theoretically, hydrolysis requires just as much energy as is generated afterwards in combustion of the hydrogen obtained. In nature not a single process takes place with efficiency equal to unity. This means that the energy consumed for the production of hydrogen alone undoubtedly exceeds the energy generated in its combustion in an airplane engine. In addition, on board the airship, gas is intended to be stored in a compressed state, and with the existing methods of compression, this process absorbs approximately another 75 percent of the energy which is generated during its combustion. Let us not forget also that electrical energy for generating pure hydrogen and its combustion are obtained mainly at thermal electric power plants, the efficiency of which is approximately 40 percent. Energy is also consumed for transport. Therefore, in order to obtain one joule of energy from the combustion of hydrogen, it is first necessary to consume, with optimistic predictions, 4 joules, and with pessimistic—12 joules of energy through the use of other types of fuel.

Another variant of gasoline replacement is the use of natural gas as fuel. Wide-scale use of any type of new fuel for transport, however, presupposes not only the presence of raw material to produce the corresponding fuel, but also a complex which would guarantee regularity of supply of the fuel for transport enterprises (in our case—airports), means of transporting the given type of fuel, storage bases and other equipment (fueling, dispensing, etc.). Shall we examine the situation in our country with respect to this service?

The productivity of the existing liquid natural gas units today does not exceed 10 cubic meters a day. Only in Yerevan is a plant being built for compressed natural gas. It will be the most modern domestic production facility. What does this plant signify for Aeroflot, however, if a major airport consumes up to 500 tons of fuel an hour! The estimated cost of the Yerevan plant is 70 million rubles. This sort of enterprise would have to be built at each airport taking planes using gas fuel. There are not enough means of transport for compressed gas. It is stored in special isothermal storages.

Therefore, for preliminary estimates, reequipping only one class 1 airport will cost the sector 100 million rubles. For comparison, let us say that all the above-ground means of storage and fueling with aviation fuel now available at all the airports in the country taken together cost approximately 1 billion rubles.

There is no doubt that the search being carried out today for alternative fuel is very interesting. All the best qualities of hydrogen fuel appear, however, only if it is a source for inexpensive and ecologically pure energy. Thermonuclear electric power plants could become such a source, but, according to the predictions of scientists, the first models of them can be created only by the second decade of the coming century. What is left for us who are living today?

In the first place—conserving the fuel that we have. The countries of the West, in the years of the energy crisis, took this path. In the United States, since the beginning of the 1980's, the yearly oil consumption dropped by 200 million tons in 5 years. This was in many ways achieved through developing more economical engines. Airplanes reduced their fuel expenditure to 20-30 grams per passenger-mile. At the same time, the YaK-40 airliner appeared on our air routes, and it consumes 96 grams of fuel per passenger-kilometer. Even the obsolete IL-18 consumed 39.5 grams!

Intensified development of petroleum is also a source of additional aviation gasoline. After all, the output of liquid fuel at domestic plants is only 10 percent, while abroad—it is twice as much.

In a word, to eliminate the fuel deficit there must first be thorough development of a number of possible variants with an economically substantiated choice of the most promising.

New Airport Planned for Stepanakert 18290178 Moscow TRUD in Russian 13 May 89 p 2

[Article by V. Yegorov, TASS correspondent: "For Nagorno-Karabakh—All Together"]

[Text] At the beginning of the 1990's Stepanakert will be able to land mainliners, capable of taking passengers non-stop from Moscow to the capital of the NKAO

[Nagorno-Karabakh Autonomous Oblast]. So far, 30-seat planes of the local Yak-40 lines ply the route to Nagorno-Karabakh. Their flight distance is scarcely enough for the route from Yerevan and Baku. Two variants of the new airport in Stepanakert have been prepared—estimated for the 60-seat Il-116 (it will be included in the Aeroflot fleet in the beginning of the 1990's) and the more capacious Tu-154, for which a larger runway is accordingly required. The best of the variants will be determined by economists, who are now considering all the "pros" and "cons."

Yu. Yurkin, USSR deputy minister of Civil Aviation, spoke of this, in commenting on the request of the TASS correspondent for aviators to participate in carrying out the decree of the CPSU Central Committee and the USSR Council of Ministers of 24 March 1988. It contains a broad program of measures to accelerate the social-economic development of the Nagorno-Karabakh Autonomous Oblast of the Azerbaijan SSR in 1998-1995.

"The construction of the new airport is still in the future, although not very remote," stated Yu. Yurkin. "But we have already carried out some of our obligations to the NKAO. The existing airport at Stepanakert is equipped with modern radar equipment which, as its "breaking-in" period showed, provides considerably more reliability and safety for flights than before."

The Ministry of Communications and the USSR State Committee on Television and Radio Broadcasting immediately responded to the March decree and sent authoritative specialists to the NKAO to study the state of affairs at the site. Today the results of their work are available: on most of the territory of the oblast, where only recently household television was considered a rarity, television and radio broadcasts are regularly relayed, and moreover, not only from Baku, but also from Moscow, Yerevan and Stepanakert itself. The plans for construction in 1989-1990 of five relays for stable reception of television programs at any point in the NKAO, creation of a modern intraoblast telephone network and introduction of reliable postal transport are being carried out successfully.

One of the indicators of the economic mismanagement of the NKAO—is the pitiful state of the water supply for the mountain kray. Even in Stepanakert itself, in most of its microrayons drinking water is supplied for one-and-a-half to two hours a day, and until recently it was impossible to even speak of a stable supply for agricultural needs. Now the situation is changing for the better: a Karabakh group aqueduct has begun to operate on the territory of the autonomous oblast.

The specialists of the union Ministry of the Gas Industry also spoke their piece, after fulfilling the task for the construction of a mainline from Fizuli to Dzhebrail and a draw-off to the settlement of Gadrutu. They planned a gas route, Mir-Bashir-Mardakert-Kelbadzhar, laid to Nagorno-Karabakh from Azerbaijan territory.

The Nagorno-Karabakh citizens expect a great deal from the construction workers: after all, it is no secret that many families in Stepanakert take shelter together in multi-family communal quarters, three schoolchildren may sit at each desk, and in kindergartens and nurseries two children may sleep in one bed. Taking into consideration the slowness of the local construction organizations, USSR Gosstroy adopted a resolution the other day to transfer them to the direct jurisdiction of the Committee of Special Administration of the NKAO. A Nagorno-Karabakh Planning-Construction Association is being created, which has been assigned to increase construction sharply, on an oblast scale. The planned increase, in the 13th Five-Year Plan, of the housing construction volumes by a factor of 1.4 should result in each family having an individual apartment or individual housing here by the year 2000.

We must note in all fairness, that by no means all the union ministries and departments are actually actively included in carrying out the March decree. For example, their assistance in the development of the light and food industry, public health, education and the highway network still leaves much to be desired.

The NKAO has recently taken a course toward full economic independence for the associations created, regional cost accounting and the revival of primordial Karabakh sectors of the economy, such as viniculture. Still, at the present stage of social-economic development of the autonomous oblast, it cannot manage without effective assistance. In general, the complicated problems of Nagorno-Karabakh must be solved by everyone together.

## RAIL SYSTEMS

Ministry's Economic Program Examined
18290153a Moscow GUDOK in Russian 12 Apr 89 p 2

[Interview with I. Myshkovskiy, until recently the chief economist of the Moscow Railroad, by correspondent A. Kapkov: "Simply Normal Economics"]

[Text] The railroads need simply normal economics today. Economist I. Myshkovskiy, who recently observed his 75th birthday and is well-known in transportation circles, discusses how to do this in a conversation with a correspondent.

[Kapkov] GUDOK readers know you more as an experienced worker. In the recent past you were the chief economist of the Moscow Railroad. But today, as a candidate of economic sciences and an author of popular books and booklets on the economics of transportation, you are continuing your work in the MIIT [Moscow

Institute of Railroad Transport Engineers]. In your view, what are the most pressing problems that must be resolved in the theory and practice of cost accounting in the sector?

[Myshkovskiy] I believe that the main task today is to return to the Leninist principles of socialist economic operation that have been unjustifiably neglected. One of these principles is recognition of the importance, if not the key significance, of transport in the country's economy. It is common knowledge that Lenin called the railroads one of the most important bases for our economy, and he identified the problems of transportation and food. Let us just remember his appeal: everything for food and transportation.

However, a disdainful attitude toward transport prevailed during the stagnant years to counterbalance Lenin's assessments. And this was manifested first of all in its impoverishment and by the pumping of its profit into industry, construction, and other sectors. As a result, the material opportunities for developing the railroads were sharply limited and difficulties arose in their technical reequipment.

[Kapkov] Apparently transport was shifted to maintenance of the state?

[Myshkovskiy] Yes, inasmuch as nothing else is left. According to data from the USSR Goskomstat [State Committee for Statistics], profit in the national economy increased by 2.3 times as much over the past 17 years. But railroad transport's profit dropped by more than 15 percent over the same period. Its share of the total profit dropped from 7 to 2.5 percent, and profitability also fell to one-third as much. As a result of the chronic shortage of profit it also had to involve budgetary funds.

[Kapkov] But why did such a situation take shape?

[Myshkovskiy] The reason is well-known: discrepancies were generated between the prices for transport's output, that is, the tariffs which had not changed for three decades, and the prices for the output of industry and construction, which were repeatedly increased. These discrepancies also undercut transport. We must look straight at the truth: without eliminating such an abnormal situation it will be difficult to shift transport to self-financing, so that it does not burden the budget.

And now, I think, a suitable time has come to correct the injustice with respect to the railroads. I refer to the forthcoming reform of wholesale—I repeat, wholesale—prices, but not retail prices and freight tariffs. That is, this does not refer to any encroachment on the passenger's wallet. It does not refer to the retail prices for tickets, but how to establish the best possible correlation between the tariffs and the prices for the products used

by transport. This correlation must provide for transport's practical transition to self-financing and supply it with the necessary resources for production and social development.

At present, the reform is proceeding in an unintegrated manner for the benefit of individual sectors. And although it is obvious that only prices that have been set correctly can become an instrument for the sectors' normal interaction with each other, a spurt in prices for fuel separately from the tariffs is being planned today for some reason. But after all, the MPS [Ministry of Railways] is one of the first consumers of fuel. Hence this increase in price should also go into the tariffs. But it is not. The products of machine building—electric locomotives and diesels—also are getting more expensive, but again this is not being taken into account in the tariffs. Then how do we provide for the sector's financial well-being if ends do not meet?

[Kapkov] So we raise the tariffs then?

[Myshkovskiy] All this must be done sensibly. Why do they plan to raise the price for coal by 90 percent and not by 40 percent, let us say, and the price for lumber by 60 percent, not by 30 percent. Clearly, the sectors want to resolve their financial problems this way. Why resolve them at the cost of others?

Increasing prices for machine building output cannot be called anything other than slowing down scientific and technical progress. For example, while an electric locomotive cost 300,000 before, it now costs 1 million. For that reason it is quite possible that the money for such an expensive machine may not be found at transport enterprises. And it will be forced to turn down the modern, highly productive equipment.

[Kapkov] This is how transport appears from a price standpoint. But in many respects this is a view from the outside. What if we look at it from within? What Leninist principles must be restored here?

[Myshkovskiy] First of all, I want to mention the course correctly taken in the sector toward increasing labor productivity. With all the shortcomings that still exist in transport in the quality of service to the national economy and passengers and with all the costs in carrying out the Belorussian method everyone knows about, we must recognize that there has been no other way. Otherwise, with the personnel shortage there would have been no place to take them. Calculations have shown that if the Moscow Railroad had not reached its present increase in labor productivity (more than 30 percent over 3 years), it would have had to bring in another 50,000 persons for its operational staffing in order to fulfill the transport volume assigned. But this, as anyone knows, is impossible.

So it was objectively necessary to proceed to increase labor productivity. There was no alternative. And the stage that we went through in accumulating resources and running in the conditions of economic operation led to development of the balance needed for cost accounting. However, what disturbs us today? I believe that the new methods of economic operation are threatened with considerable danger. And defining this danger could have been like the bureaucratization of cost accounting. The Gosplan, and the Ministry of Finance, and the banking system have taken a hand in this.

[Kapkov] How are they to blame?

[Myshkovskiy] Cost accounting is being unduly complicated in the upper stories and is becoming sluggish. It is being entangled in norms and squeezed into different models and what are scientific formations only at first glance. But after all, if we look into it, the error of the 1965 reform, which came to naught because the worker was pushed aside and because it was incomprehensible to him, is being repeated.

As then, only a person highly skilled in bookkeeping can gain an understanding of all the complex calculations of norms and funds today. But this is disgraceful! And this has to be stopped immediately if we do not want cost accounting to be only for those at the top and the bookkeepers, existing only in economists' offices.

[Kapkov] But then cost accounting needs to be made as simple and easy to understand as possible.

[Myshkovskiy] Exactly. It is not today, though. Look at how many norms are used in deducting from an enterprise's profit. There is the payment for funds, for manpower resources, for water, for land, for minerals, and for pollution of the environment. And in addition, private taxes of a sort are being introduced—on estimated profit, on the wage fund plus various deductions for the centralized funds of higher organizations.

This very complicated system of deductions is leading to the point that nothing is left for an enterprise in the final analysis. Calculation has shown that if the previous norms are retained, in particular the 6-percent charge for funds and the charge of 300 rubles for each worker (the charge for manpower resources), railroad transport will be obliged to give all its profit to the budget in accordance with these two payments alone. And it will have literally nothing left for its own needs. Not for any funds for production development, the social area, or housing construction, especially as we will not have to speak about self-financing then.

[Kapkov] So what is the solution?

[Myshkovskiy] We must replace this refined normative surplus-appropriation system, so to speak, with only one simple, clear tax on profit, as it is done in any normal economic system. We could establish that 60 percent of the profit balance, as an example, is to be given to the budget and 40 percent left at the enterprise's disposal. It does not matter to the enterprise what method is used to determine this 60 percent, whether it is a charge for funds, or for manpower resources. It only needs to know that it will have 40 kopecks left from each ruble of profit. It is similar to an income tax. And this tax can be either a progressive or a graduated tax. That is, the tax rate for a profit of 100 million will be less than for a profit of 1 billion. This is the principle all over the world: the deduction from profit is differentiated in accordance with the amount of profit itself. And this is fair.

[Kapkov] But won't economic levers be weakened with the abolition of the norms?

[Myshkovskiy] Not at all. Take as an example the charge for funds which has existed for over 35 years. Experience has shown that its effect is minimal. But why? Some 70 percent of all the ministry's fixed capital are stationary facilities and structures. After all, they cannot be reduced by any norms. A bridge will stand whether there is a charge or not. And no one will remove this bridge, no matter what charge is set. The inclination to work with less resources is stimulated by production cost and depreciation deductions. The more assets, the more depreciation, and the more depreciation, the greater the production cost and the expenses.

Depreciation deductions already constitute a large proportion of the expenditures in railroad transport—30 percent.

But what is a tax on wage funds needed for? After all, the rigid requirements to increase labor productivity do not leave collectives a chance to enlist additional hands, anyway. Plus the no less rigid correlation between the rate of increase in labor productivity and wages. After all, if the correlation is not maintained, the right to wages is lost. Why do we have more taxes to stimulate labor productivity? These are unnecessary.

The reverse side of the norms is that there is always the temptation to understate them. That is, the ground is prepared again for deriving advantages through less intensive norms. Do we once again become dependent on the Gosplan and the Ministry of Finance and try to prevail upon the bureaucrats and flirt with their willfulness?

[Kapkov] But this is a new administrative system and the bureaucratization of cost accounting relationships. Why create such a system which must be touched up and corrected all the time?

[Myshkovskiy] That is what I am saying, there is no point. But after all, it does not end with the bureaucratization of cost accounting. Take the models devised for cost accounting: a first, second, and today even a third one. Which one is the best? For some reason they are promoting the second model in the press now as almost

a panacea. But after all, there are many negative aspects in it as well. For example, it conflicts with the principle of the social sphere's priority. Why? Because when it is used they begin organizing the sources of wages in accordance with the residual principle. But wages are part of the social sphere, along with kindergartens and housing. And even first of all, inasmuch as we all live on our wages, but they have entered it as a residual.

An important feature such as expenditures as a whole is lost with the second model. Only physical inputs and depreciation, which make up only 60 percent of the expenses, are deducted from incomes. And the remaining 40 percent—the wages—are excluded from the production cost. And it turns out that on the one hand, wages are organized in accordance with the residual principle, and on the other hand, the incentive to economize on labor expenses is lost.

[Kapkov] In other words, the second model does not provide incentive to increase labor productivity?

[Myshkovskiy] Absolutely correct. The main effect of an increase in labor productivity in economizing manpower resources is lost. This is the second model for you. For this reason, I believe, no models are needed at all. Everything can be much simpler. After all, there is a method of determining profit as the difference between incomes and expenditures, and there is a procedure for deductions from this profit. They are quite sufficient to conduct the economy normally.

[Kapkov] But evidently cost accounting cannot be limited to this alone, all the same. It must also be improved, after all.

[Myshkovskiy] It is simply necessary. And the first step in such improvement should be a real struggle, not a paper one, against wage leveling, this socially dangerous disease which undermines the influence of wages on the final results of labor and incentive. But look at how wage leveling has taken root in the wages of ITR's [engineering and technical personnel]. It has been legislatively programmed with the introduction of new rates and salaries. A wage for the position, not a wage for the worker, for his specific labor, has been legalized, so to speak. A kind of table of ranks. It turns out that the capable and the mediocre, the idler and the hard worker, begin receiving the same amount-200 to 250 rubles. The "separations' in the wages are not great. Where is the fairness? After all, the Law on the State Enterprise stipulates that the wage for an ITR should be tied to a specific person. But thus far the labor collectives and administration are not making use of this right, conniving so that a talented employee leaves for a cooperative, where they pay properly, according to his work.

[Kapkov] Not only engineers and specialists, but workers as well, are complaining about the dominant influence of wage rates. No matter how you try, they say, you cannot jump over the rate and they have reduced the bonus.

[Myshkovskiy] Such a situation, especially when a wage is for the time worked, discourages persons, in fact. While the relative proportion of a bonus was 20 to 22 percent before the Belorussian method, the bonus dropped to 10 to 15 percent in the wage structure after the transition. This does not provide incentive to increase labor productivity, of course. Hence the wage structure must be changed and the proportion of the bonus must be increased in it as a basic incentive.

[Kapkov] The role of incentives has weakened in general lately. It really is a paradox: the Goskomstat reports that all sectors, including the Ministry of Railways, have earned above-plan profit as never before. But at the same time, the financial condition of a specific railroad worker has not improved appreciably.

[Myshkovskiy] It could not be any other way, inasmuch as a large part of this profit—an inflated amount—was acquired through inflated prices and gross output. The priority of profit obviously has been overstated. But they are not particularly concerned about the production cost and reducing expenses. In other words, they are acquiring profit today more through extensive factors. This has become one of the reasons for the increase in prices and the disappearance of inexpensive goods. Hence the slogan: profit at any price must be condemned. For this we must provide incentive for collectives to obtain profit by reducing expenses and productiion cost. And this can be done if the part of the profit acquired in this way or all of it remains in a cost accounting income. This is the only approach that will be fair.

Special Railcars, Tourist Autotrain Plans Aired 18290153b Moscow GUDOK in Russian 12 Apr 89 p 3

[Article by engineer Yu. Fayershteyn: "A Railroad Cruise"]

[Text] Many people have certainly had occasion to read about the tourist cruises on rivers and seas. And each time visualize a white liner rocking on the waves. And there on board golden garlands of lights (in the evening, of course) are reflected intricately in the water. The sound of music softly playing and the carefree laughter of the vacationers. Everything indicates comfort and the presence of an invisible, thoughtful eye, and dare I admit it, luxury and inaccessibility.

It is not hard to imagine how during the day the sharp prow of this liner cuts through the violet sea water with nonchalant calmness, with the same tourists on board. Some are getting a tan, some are playing something, and some are taking pictures of the beautiful shoreline with a camera or videocamera.

I have not been lucky enough to experience such a luxurious life on the waves. And not because I get seasick, but rather because I am accustomed to feeling solid ground underneath. And I like to travel not on the surging water, but by road, or better, the railroad.

And the thought occurred to me: somehow combining a romantic sea cruise with the opportunities of the railroad. At first this idea seemed unrealizable, but later, as I began thinking out the details, it was quite practicable.

I began fantasizing by plotting the most interesting routes on a diagram of the railroads in the USSR. There turned out to be more than enough of them, and enough exotic places to spare. As an example, Moscow to Krasnovodsk. In a day one can be on the banks of the beautiful Volga, and in another day, rolling across the silent sandy desert. Mysterious architecture, donkeys and camels, watermelons and melons, brightly colored robes, and the intermingling of the Russian, Kazakh, Uzbek, and Turkmen languages...

And traveling from Krasnovodsk across the Caspian by ferry and farther across the Caucasus with its famous historic monuments and resorts! Indeed, no capitalist will turn this down. And not only rubles, but foreign exchange, can be earned as well.

Just imagine—heat all around just as in Africa and the sand dunes seen through the window, but we are sitting under the transparent dome of a double-deck railroad car where it is pleasantly cool in unimaginable comfort. From time to time our conversation is interrupted by the conductor. No, excuse me, not a conductor, but a steward in a white uniform! On a tray (well, just like in the movies) are frosty glasses of fruit juice and cups (not glasses, of course) of the most aromatic coffee.

The lower deck of the car is a dwelling. There will be spacious compartments there finished in the current fashion, with the maximum number of conveniences. We will not permit the designers to skimp—all the "extravagances" have been paid for. And there will be a shower in the car: it will be pleasant to freshen up before dinner.

The program for relaxation on wheels includes excursions to the cities we pass through, dinners in restaurants with national foods, bathing in the sea, and anything else for which there is not enough imagination now.

Along with us are foreigners, liberally laying out foreign exchange, hard currency, of course, for everything. With purely foreign ingenuousmess they will alternately be enraptured with the exotic features and the enterprising nature of Soviet railroads.

Being lost in daydreams, I did not say that our train should consist only of comfortable double-deck cars, two or three restaurants transformed into video salons and dancing as well, if you wish. A typical feature of these cars will be the brilliantly expressed inclination of the designers to achieve maximum comfort, not the maximum passenger capacity.

And those touring by automobile can be carried with their vehicles as well, I think. The seamen do this, so why can't we! And we need only couple a garage car to a passenger train (a Finnish double-deck railroad car for automobiles, for example) and set a tariff for this that does not scare the tourists away. The practical motor tourist will realize what is more advantageous for him—filling the air with dust for 3 days in a car without sleep and rest or saving gasoline and effort for a trip over the mountains, blissfully happy in a comfortable railroad car. And he does not have to be concerned about his "Zhiguli."

Before writing this article, I became interested in how our railroads regard the problem of tourism and the double-deck cars in particular. Favorably, it turns out. So why don't we have such cars?

Here the fantasy ends and the sad prose begins.

In the Soviet Union, only one plant in Kalinin has specialized in large-series production of passenger cars for locomotive traction. For this reason, the designers of this very plant, jointly with scientists of the Kalinin branch of the All-Union Scientific Research Institute of Railroad Car Building, have been charged with designing and building a new domestic double-deck car.

Incidentally, study of this subject was not undertaken at their own initiative, but only after a number of directive documents were published which demanded a fundamental increase in the technical level and the quality of manufacture and competitiveness of the products of transport machine building and that they be brought up to date.

The main purpose of these documents is to provide for technical reequipment of railroad transport in short periods of time by delivering passenger cars of progressive new designs. The double-deck car is also mentioned in the list of new equipment.

Series production of three versions of cars with a mansard roof has been proposed. They include the one I was dreaming about—a tourist version with a transparent dome for viewing. Incidentally, the Leningrad car builders made a prototype of such a car a quarter century ago. Unfortunately, the experimental model did not work out, but it was experimental, after all. So the Kalinin workers would not have had to begin from zero.

But not one double-deck car has come out of the gates of the plant yet. The Kalinin workers not only did not fulfill the assigned program, but lost the chance to become the fashion arbiters for cars with mansard roofs on the international market. For almost 30 years the plant has been marking time—building archaic cars with numbered reserved seats with Ministry of Railways approval, cars which no one in the civilized world uses for trips over long distances.

So you will not have the occasion to spend a vacation in a comfortable railroad car, traveling on the new BAM [Baykal-Amur Mainline] route, let us say. The Ministry of Heavy, Power, and Transport Machine Building has been let down and the Ministry of Railways has lost its revenue, including foreign exchange. But how much have you and I lost, dear comrades?..

## Moscow Metro Problems, Future Plans Highlighted

18290162 Moscow SOTSIALISTICHESKAYA INDUSTRIYA in Russian 25 Apr 89 p 4

[Interview with Yu. Grishechkin, chief engineer of the Subways Main Administration, USSR Ministry of Railways, by correspondent V. Startsev: "The Best in the World? Yesterday, Today and Tomorrow on the Moscow Metro"]

[Text] For decades we have written verses and sung songs about it, we have shown it with pride to foreign guests, and we have admired and loved it.

But in recent years there has been a great deal of criticism directed at the capital's metro. The overcrowded, stuffy cars, the frequent stops on open lines, the crush at the escalators... What has happened to our convenient, reliable, rapid transportation?

Yu. Grishechkin, chief engineer of the Subways Main Administration, responds to questions from corresponmdent V. Startsev.

[Grishechkin] The Moscow Metro is growing and exapanding every year, and more and more new lines and new stations are appearing—there are 138 of them already. But new problems are emerging as well. The capital's metro has become unprofitable, and the five kopecks in fare from a passenger has not provided for operating costs for a long time.

[Startsev] And this is the reason for the proposal that has caused a stir—to raise the metro fare to 10 kopecks?

[Grishechkin] Yes, there have been suggestions to raise the fare and to introduce automatic admission points at transfer stations. As of 1 January this year, all subways in the country shifted to full cost accounting, and now the lack of funds is being felt especially critically. Nevertheless, the Subways Main Administration considered the proposal to raise the fare to be unacceptable.

[Startsev] On the one hand, this is gratifying. But isn't there also the apprehension that this will have an effect on passenger safety later on?

[Grishechkin] We are fully aware of the kind of responsibility we have to our passengers. And the least irregularity in our work affects us no less than others, believe me. We look into and analyze every specific case and draw conclusions.

But alas, everything does not depend on us alone. For example, the escalators. This is our worst problem! Many of them must be changed; they have been in operation for 50 years, and with an immense workload, especially during the "peak" hours. But for a long time the plants have not been turning out spare parts for the machinery, which was taken out of production 15 years ago. And all these years we have been troubled by the constant searches for the needed parts. The range of spare parts does not meet the requirements for the series machines, either. There is also another problem. The "window" for preventive maintenance is small, only about 5 hours, and we barely manage to cope with the current repair. But sometimes we do not succeed, and we shut down the escalator for a day or two, or for an even longer period. Each month there are no less than 12 escalators undergoing major repair. Sometimes a situation develops in which we are even forced to close the exit to a station.

[Startsev] But what if there is no second exit? Incidentally, why don't many Moscow stations have one? After all, it is terrible to think about the kind of dramatic situation that could develop if there were a sudden fire at such a station.

[Grishechkin] We are doing everything to prevent such an occurrence. And as you know, we have been successful for over a half century. But all the same, the terrible fire on an escalator at the King's Cross station on the London Underground in November 1987 compelled us to be even more vigilant. It was decided at the initiative of the MPS [Ministry of Railways] that escalators will now be manufactured with a stainless steel guard rail. As of April this year, plants of the Mintyazhmash [Ministry of Heavy, Power, and Transport Machine Building] began turning out metro cars that are fireproof. However, we cannot say that these cars meet the current standard. The government adopted a decision to speed up the period of time to develop a car with a stainless steel body, electric induction drive (it does not burn and does not spark, unlike the rotary drive), automated control, and technical diagnostics and regeneration. Series production is planned for 1991.

We are also concerned about the lack of second exits. Construction of them has been scheduled in this five-year plan at the "VDNKh" [Main Committee for Exhibition of Achievements of the National Economy], "Belorusskaya-Koltsevaya," and "Baumanskaya" stations on the Moscow Metro. And they are scheduled at seven more stations in the 13th Five-Year Plan.

[Startsev] Nevertheless, completely new stations such as the "Savelovskaya" and "Tsvetnoy Bulvar" were approved with one exit.

[Grishechkin] Unfortunately, the need to put the new stations in operation as quickly as possible compelled us to agree to build them the way the Metrogiprotrans [State Planning and Surveying Institute for the Construction of Subways and Transportation Facilities] plans them. But we will finish work on them later without stopping traffic.

[Startsev] For many years the Moscow Metro stations were built like palaces—out of marble and multicolored granite—and were decorated with bronze and gold leaf. And at the same time they had no toilets, coffee shops or snack bars, and no kiosks as in other countries.

[Grishechkin] You're right. We have discussed this matter more than once. The first metro builders, unfortunately, did not take a great deal into account, mainly that Moscow would grow so much. But now it is not so simple to correct the miscalculations when the metro is so overworked. However, in accordance with a USSR Gosstroy decision, it is planned to work over the construction standards for designing subways in 1991; the underground space is to be utilized to expand services for the people. Although the fire service is against such a decision; it believes that outside facilities may become sources of ignition.

[Startsev] But don't fires really take place in the metro now? After all, there were two cases in February alone. Or are these rumors?

[Grishechkin] No, they are not rumors. Indeed, on the morning of 15 February the third car in a train bound from "Barrikadnaya" to "Pushkinskaya" caught fire. On 16 February a driver noticed smoldering ties not far from the "Akademicheskaya" station and began putting them out. In both cases the trains were stopped and the traffic schedule was disrupted, but there were no casualties.

[Startsev] They did not suffer physically. But morally? I talked with the passengers who traveled that day on the Kaluzhsko-Rizhskaya line. The trains stood for a long time on the open track in complete silence—neither the driver nor the stationmasters on duty informed the people what had happened. Is it really impossible to inform the passengers? And more—the oppressive silence affects one's state of mind, in my view. Can't they realy turn on some music during the forced stops?

[Grishechkin] Under the metro rules, if a train is standing for 5 minutes or more, the driver must inform the passengers what happened. On this occasion he was engaged in extinguishing a fire. Let me use this occasion to extend apologies to the passengers. As far as the music is concerned, I will pass this suggestion on to our medical service.

[Startsev] Fixed printed posters have made their appearance at some stations which suggest that passengers refer to the metro's telephone in the event that they are late because of its fault. How do we interpret this? Are you deliberately signing your name to your inability to operate without disruptions? Or is this a distinctive call for a

five-kopeck coin—is it all right this way too? Your difficulties are understandable, yet it is necessary to return the glory of the past to the Moscow Metro.

[Grishechkin] Unquestionably. I have already stated that we considered a fare increase unacceptable. We have had to urgently seek other ways to obtain funds, and we have found them, you know. We involved the cooperatives. Last year 25 of them were established in the country's subways, including 13 that turn out consumer goods which prepared items for the sum of 213,000 rubles and 12 that provide nonspecialized services for a fee, and their investment was 135,000 rubles. The cooperative members who sell flowers in the capital's metro pay 1,000 rubles per month for each meter leased.

Moreover, we are establishing production facilities which bring in a profit. For example, in the Moscow and Kharkov metros they have begun raising mushrooms... Those in Kiev have taken a step farther—they are developing a stock pond. And the people in Baku have taken a vegetable growing sovkhoz for the balance. So there will be funds.

Now, on the development of the metros, particularly the one in Moscow. The "Plan for Developing the Subways up to the Year 2005," which has been coordinated with the USSR Gosplan, has been drafted as the basis for a long-range subway construction program in the country. In the long term, aside from the construction of new lines, it is planned to extend a number of existing lines. Another 140 kilometers of underground mainlines have to be laid out in Moscow. However, the development of peripheral zones of the city and the construction of new major rayons present a new problem in providing comfortable transportation for passengers with a minimum expenditure of time. In addition to the traditional metro, we plan to develop express lines. These will be highspeed 10-car trains operating between stations over mixed underground and above-ground routes 4 to 5 kilometers long. We are thinking of introducing the first such line in the capital from Mitino to Butovo.

We are also planning high-speed trains for the ordinary underground lines in the future. Test cars are already being operated on the circumferential line.

And I want to mention something else. Lately the behavior of passengers has deteriorated noticeably—they are throwing trash on the floor, they manage to get through in an intoxicated condition, and they are using obscene language. But the main thing is that there are also persons who remove the artistic molding and pick off the tile. After all, these are unique works of art, and it is simply impossible to replace them at times.

In addition, we are now faced with a sizable problem in connection with restoring the marble walls, lamps and tiles. Many plants which took part at one time in manufacturing design elements for the Moscow Metro have long since lost the drawings for one item or another or they have simply ceased to exist. We can replace with something different and a little simpler, of course. But I do not think this would be correct.

The Moscow Metro has been and should remain the national property of our country and the pride of its people.

**Yerevan Metro Problems Reviewed**18290175 Yerevan KOMMUNIST in Russian
2 Apr 89 p 2

[Article by A. Ovanesyan, senior engineer, Yerevan Metro: "Don't Repeat the Mistakes: Certain Questions of Metro Planning, Construction and Operation"]

[Text] The Yerevan metro and five stations was commissioned in the spring of 1981. Later on another three were put into operation. The first impression of the metro was simply stunning: people came with their families "for a look." And there was something for them to admire—the stations were distinguished by the original architecture, and some were even made part of the sights of the capital.

But interest in the metro declined noticeably in time, and today we have to establish the unhappy fact that the unique, impressive, and very expensive facility is not being utilized to its maximum gain. Why? There are many reasons. This is precisely what is being discussed.

The basic reason for this state of affairs is the poor "geography" of the stations, which turned out to be some distance away from the places where the heavy passenger flows are formed and the main city transport points.

So the planning institutes, in their effort to reduce the estimate of construction cost to the maximum extent, gave obvious preference to a route over 3.5 kilometers long on the section from the milling plant to the overpass across Tamantseri Street and extended it above-ground adjacent to the railroad bed. As a result, they did not succeed in locating the "Sasuntsi David" station on Privokzalnaya Square, although housing blocks with stores selling manufactured goods and food are next to it.

Few people are making use of the metro services from the opposite entrance on Sevani Street, since transportation is not provided in this section and there are no institutions or stores. Indeed, is it convenient for a passenger with children and hand luggage to continue to a metro station from the intersections of Oktemberyan Avenue, Bakvi and Mayakovskiy Streets, and Privokzalnaya Square if there are stops there which are linked with practically every corner of the city? It is understandable that Yerevan residents prefer to make use of a bus or a trolleybus.

The "Gortsaranain" station, located in an uninhabited area, far from the industrial enterprises—the tire and cable plants, and the "Nairit" NPO [Scientific Production Association]—as well as from the busy Ordzhonikidze Avenue, essentially does not justify its name and designation, either. This is a consequence of the aboveground route that was not adequately considered. The "Yeritasardakan" and "Oktemberyan" stations are poorly situated as well.

The figures also attest to the poor efficiency of the "Marshal Bagramyan," "Gortsaranain" and "Shengavit" stations. While the other five stations each handle 15 to 20 percent of the overall transport volume, the stations named handle 4.7, 6.5, and 5.9 percent, respectively!

If the Yerevan Metro is compared with the metros in Minsk, Gorkiy and Novosibirsk, which have the same number of stations and shorter routes than ours, it turns out that our metro carries many fewer passengers each year. And this difference is calculated in millions of passengers. The production cost of transporting one passenger—16.6 kopecks—is also high. As a comparison, it is 8.36 kopecks on average for the country, 6.6 kopecks in Minsk, and 13.4 kopecks in Novosibirsk and Gorkiy.

The statistics cited once again convince us that the selection of sites for the metro stations in the republic's capital was not done correctly. The lack of glasnost and insufficient press treatment of the problems of planning and building the unique project have had an effect on this state of affairs to a considerable extent. In order to avoid similar ill-considered and irresponsible decisions in the future, the public must be informed through the mass media about the projects being proposed, which will make it possible to choose the best alternative after wide public discussion.

Providing for traffic safety is one of the most important conditions in transport work. But there are serious omissions here as well. Thus, in order to prevent rolling stock from coming off side tracks onto the main track and a collision with trains under way, a special preventive dead-end siding is usually provided. The "Sasuntsi David" station has such a siding, though for some reason it is situated ahead of the side tracks, not behind them. Moreover, blocking is absent between the entrance light signal from the even side and the switch of the preventive siding mentioned.

The exit from the tunnel (the city branch line to the milling plant) was poorly chosen and is a violation of the Traffic Safety Rules. After all, this is the bottleneck of a group of railroad tracks at the Yerevan station with its intensive switching operations and the related danger that rolling stock may derail and turn over on the metro tracks.

The impression is created at times that the planning of the facilities was carried out by different planning organizations separately from each other. Otherwise, how can we explain the fact that the "Druzhba," Yeritasardakan," "Shengavit" and "Ploshchad Spandaryana" stations have lobbies with two rows of doors, while the four other stations do not have them. Or the "Marshal Bagramyan," "Gortsaranain," "Sasuntsi David" and "Ploshchad Spandaryana" stations have provided restrictive lines of different-colored stone on the boarding platforms for the passengers' safety, while the "Yeritasardakna" and "Ploshchad Lenina" stations do not have them. Although the "Druzhba" station has such a strip, it is hardly distinguishable from the floor. Six stations have hot air screens to warm the entrances and exits, but they "forgot" them at the "Ploshchad Lenina" and "Sasuntsi David" stations...

It cannot be denied that the entrance to the "Ploshchad Lenina" station is attractive and efficient: the entire front wall of the entrance is made of glass. But how many cracks there are in it! There are single doors, without a lobby and a hot air screen; a heating system such as this does not exist at all. During the winter, the automatic devices for exchanging coins and the automatic passenger admission points often freeze and stop functioning! We need not mention that the low temperature and drafts in the entrance affect the health of the station employees.

There are many other shortcomings as well. If we only consider the floor covering at the entrance: instead of a durable material, they used tuff, which crumbles and long ago outlived its usefulness. All the beauty and intended architectural effect is being lost because of the unsatisfactory system of lighting on the ends of the boarding platform and the area with fountains.

The scene at the "Marshal Bagramyan" station is similar, except that openings of up to 30 centimeters of unknown purpose were left along the perimeter of the stained glass at the entrance, and more than enough dust, dirt and cold come through them. The entrance to the traction substation here is through the toilets and showers, for some reason... I wonder how the designers and builders of such a highly "original" solution explain this.

Cleaning and replacement of the glass on the grating of the inclined pipe at the "Yeritasardakan" station has become a problem. If the architect "forgot" to indicate in the plan how to obtain access to the grating, let him do this now.

In addition to the shortcomings in planning decisions, there is the extremely poor quality of construction and installation work, particularly in waterproofing. And this has led to the point that ground water soaks through at all stations and in the tunnels, putting expensive equipment, communications lines, and cable out of commission. Over a relatively short period of time, the facing marble at many stations lost its color and luster, and

dirty streaks were formed on the walls and the arches. And while individual unfinished areas may be put in order during the process of operations (which is being done, by the way), dertermining the place and causes of the water leaks and eliminating them without disrupting the integrity of the facing is extremely complicated. Once again, the plan did not provide for hatches to inspect drains and gutters. Waterproofing was performed so poorly that the influx of ground water in the tunnels is eight to 10 times more than the permissible limit.

The problems do not end with this. Because of the poor quality of track work, trains have been operating for a long period of time on individual sections at speeds of 10 to 25 kilometers per hour instead of 65. Recently the concrete collapsed for a distance of 300 meters on the line between Gortsaranain and Shengavit, and they had to restrict the speed of the consists for this reason. On the sloping entrances of certain stations, cracks developed because of the absence of movement joints and rail joints were not insulated at dozens of places on the tracks at the electric depot. Cars were derailed twice because a switch

was not installed correctly. Powerful tunnel ventilation was not set up in four shafts, and venting in underground servicing and technical areas does not operate efficiently to this day; there is absolutely no influx of fresh air in places.

As strange as it seems, the Yerevan Metro was accepted for operation with a large number of serious imperfections with an "excellent" evaluation of the first five stations and a "good" evaluation of the rest. The pursuit of indicators which was typical of the era of stagnation and the haste and rush for the sake of "shock" reports had their effect.

It cannot be denied that this article is belated today; unquestionably, it should have appeared during those years that the metro was planned and construction on it was begun. Neverthless, it is needed today as well, for as painful as it is, we must learn by our own mistakes. This is important first of all because they will not be allowed henceforth, in the future. After all, construction of the metro is being continued.

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